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1/- Bottles, 9/- per Dozen; 1-lb. Bottles, 18/- per Dozen;
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*The increased output warrants the reduction, which is made
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GOLDEN MALTEX

CONTAINS

25 Per Cent. of Allen & Hanburys' Extract of Malt,

The properties of which are well known.

CAPSULED "McK. & R." PILLS.

McKesson & Robbins : Originated 1870 : New York.

WHY SHOULD THE "McK. & R." PILLS BE PRESCRIBED?

1. Because they are prepared from materials of the highest quality only.
2. Because they are made according to the B.P. or other Standard Authorities, and therefore all the combinations are well tried and of recognised value.
3. Because they are taken pleasantly—being tasteless—and readily, being ovoid in form.
4. Because they are not subjected at any stage of preparation to the injurious action of heat.
5. Because the coating of *pure transparent gelatine* preserves the contents from oxidation.
6. Because they are always soluble, and the contents soft and quickly disintegrated.

LIST OF PRINCIPAL CAPSULED PILLS.

Aloes, all the B.P. combinations 5 gr.		Laxative, Vegetable—	
Aloes, Dilute (Dr. Hall Dinner Pill)..... 4 gr.		Res. Podoph. | Ext. Coloc. Co. 1 gr.	
Aloes Barb. | Pulv. Ext. Glycyrrh.		Ext. Hyosey.	
Saponis Pulv. | Theriaca, aa 1 gr.		Ext. Tarax, aa 1-4 gr.	
Aloes and Nux Vomica—		Ext. Menth. Pip.	
Aloes Soc. 1½ gr. | Ext. Nucis Vom. ½ gr.		Mercury, Biniiodide 1-16 gr.	
Aloin ½, ¼, ½, 1 gr.		Mercury, Proto-iodide 1-20, 1-16, 1-8, 1-4 gr.	
Aloin, various combinations.		N.B.—Made from the absolutely pure <i>gelatine</i> impalpable powder, free from mercury and from biniiodide.	
Anti-Dyspepsia (Fothergill)—		So-called "green" proto-iodide contains uncombined mercury.	
Strychnina ¼ gr. | Pulv. Ipecac. 2-3 gr.		Mercury with Chalk..... 1 gr.	
Pulv. Piper Nig. 1½ gr. | Ext. Gent. 1 gr.		Morphine Muriate 1-8, 1-4 gr.	
Arsenious Acid 1-20, 1-50 gr.		Nitro-Glycerine..... 1-200, 1-100, 1-50 gr.	
Asafoetida, U.S. and B.P. 5 gr.		Opium 1 gr.	
Atropine..... 1-100, 1-300 gr.		Opium and Camphor..... 1 gr.	
Blue Pill, B.P. 1, 2, 3, 5 gr.		Opil Pulv. 1 gr. | Camphore 2 gr.	
Blue Pill, with Colocynth and Hyoseyam. 5 gr.		Pepsin, Purc 1 gr.	
Calcium Sulphide 1-10, 1-4, 1-2, 1 gr.		Phosphorus 1-100, 1-50, 1-30 gr.	
Calomel, Colocyn., and Hyosc. 5 gr.		N.B.—In no kind of Pill are the advantages of the "McK. & R." method better exemplified or more in request.	
Calomel Co., B.P. 5 gr.		No other brand of Phosphorus Pills is equally reliable for the administration of the unoxidised medicament.	
Camphor and Hyoseyam..... 2 gr.		Phosphorus and Iron—	
Camphore. | Ext. Hyosey., aa 1 gr.		Phosphor. Pur. 1-50 gr. | Ferr. Redact 2 gr.	
Cannabis Indica 1-4, 1-2 gr.		Phosphorus, Iron, and Quinine—	
Cascara Sagrada 3 gr.		Phosphor. Pur. 1-100 gr. | Ferri Carb. 1 gr.	
Cathartic Comp., U.S.P.		Quinine Sulph. 1 gr.	
Ext. Jalap 1 gr. | Hyd. Subchlor. 1 gr.		Phosphorus and Nux Vomica—	
Ext. Coloc. Co. 1-1-3 gr. | Gambog. 1-4 gr.		Phosphor. Pur. 1-50 gr. | Ext. Nucis Vom. 1-4 gr.	
N.B.—The ready solubility of the "McK. & R." Pills is readily proved by taking a dose of these.		Phosphorus and Quinine—	
Colocynth Comp., B.P. 4, 5 gr.		Phosphor. Pur. 1-50 gr. | Quinine Sulph. 1 gr.	
Colocynth, other combinations.		Phosphorus and Valerianate of Zinc—	
Copaiba Compound—		Phosphor. Pur. 1-50 gr. | Zinci Valer. 1 gr.	
Cubeba Pulv. 2 gr. | Mass. Copaib. 1 gr.		Picrotoxin 1-80 gr.	
Ferri Sulph. Exsic. .. 1-2 gr. | Tereb. Venet. 1-1-2 gr.		Podophyllin 1-8, 1-4, 1-2 gr.	
Corrosive Sublimate 1-30, 1-20, 1-10 gr.		Quinine, Bisulphate 1-4, 1-2, 1, 2, 3, 4, 5 gr.	
Croton Oil 1-2 gr.		Quinine, Sulphate 1-4, 1-2, 1, 2, 3, 4, 5 gr.	
Diuretic—		Quinine Co. (Anti-Malaria).	
Ext. Buchu, Potass. Nitrat. 1 gr.		Largely proscribed in America with excellent results.	
Scilla Pulv. 1-2 gr.		Rhubarb Comp., B.P. 5 gr.	
Emmenagogue—		Rhubarb with Blue Pill 5 gr.	
Ferr. Sulph. Exsic. 1-1-2 gr.		Salicylic Acid 2, 5 gr.	
Thus, American 1-1-2 gr.		Soap Comp., B.P. 5 gr.	
Aloes Socot. 1-2 gr.		Squill Comp., B.P. 5 gr.	
Ergotin 3 gr.		Strophanthus 1-20, 1-4 gr.	
N.B.—Each Pill = 30 gr. ergot or 30 ms. fl. extract. This form is more reliable and uniform in effect and more agreeable than the liquid preparations.		Strychnine 1-50 gr.	
Enonymin 2, 3 gr.		Tonio Laxative (Fothergill)—	
Iodoform and Iodoform with Iron 1 gr.		Quinine Sulph. 2-3 gr. | Ferri Redact.	
Ipecac. 1-4, 5 gr.		Strychn. 1-30 gr. | Ext. Bellad., aa 1-4 gr.	
Ipecac. Co. 5 gr.		Valerianates, Iron, Quinine, and Zinc.	
Ipecac. and Squill, B.P. 5 gr.		Warburg's Tincture and the same without Aloes.	
Iron Pill, B.P. Add. 3, 5 gr.		Each Pill = 1 fl. drm. of the Tincture.	
Iron Arseniate..... 1-8 gr.		Zinc Phosphide 1-4, 1-2 gr.	
Iron reduced by Hydrogen (Quevenne)..... 1, 4 gr.		Zinc Valerianate..... 1 gr.	
Iron and Quinine Citrate 2 gr.			

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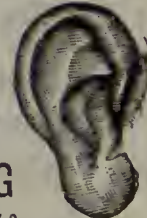
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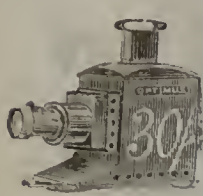
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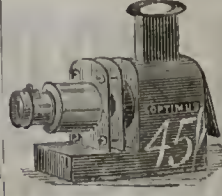
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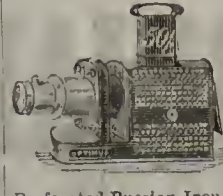
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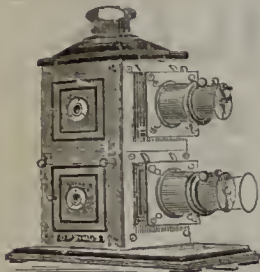
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Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Literature.

"Hooker's British Flora," 1837, for "Wills' Materia Medica." A. Bayly, 4 Bedford Cottages, Plymouth.

Exchange British and Colonial Diary for Chemists' and Druggists', or offers. Cullen, Chemist, Norwich.

Offers wanted for the *Pharmaceutical Journal* from 1873 to 1890 inclusive. "Major," 9 Manor Square, Otley, Yorkshire.

Latin books.—"Latina Principia," "Caesar" (with key), "Primer," "Dictionary." What offers? Fletcher, 3 Bridge Street, Horncastle.

Squire's (14th, quite new) "B. P." (with notes, tips, and equations), Edmond's and Oliver's "Botany," Griffith's "Prescriptions," Cassell's "Latin Dictionary," Allen's "Latin Grammar," Buckmaster's "Chemistry," "Minor," 57 Hall Place, W.

Christiana's "Perfumery"; Muter's "Chemistry"; Plesse's "Perfumery" (English); Atkinson's "Perfumery" (German); Hentley's "Botany," 2nd edition; Bentley's "Botany," 3rd edition; Lescher's "Elements of Pharmacy," 3rd edition; wanted offers. 210/72.

Atfield's "Chemistry," 1837, 8s.; Bentley's "Manual," 1837, 8s.; "Marthudale," 1888, 4s. Squire's "Pharm. Lond. Hospitals," 1885, 3s.; "British Pharmacopoeia," 1885, 3s. 6d.; Squire, 1885, 6s.; in good condition, new, Royle's "Materia Medica," 4s.; "Pereira," 7s. 6d.; all post free. Dalwood, 75 Aldersgate Street, E.C.

Proprietary Articles.

Decid. bargain.—Moonseed bitters, 21s. and 36s. dozen. 79/35.

Five 1-lb. tins Brand's pills, coated; Kirby's, 4s. 1b., carriage paid. Fleming, Broughty Ferry.

Patent medicines, some wrappers slightly soiled; what offers? See 2s. 6d. Barry's trichophorous; nine 1s. 6d. Ferris' wine of beef and iron; two 1s. 6d. Bishop's eff. anm. cit. bis-muth; four 1s. 1½d. eclectic; six 1s. 1½d. Price's magic liniment; three 2s. 9d. Cheltenham salts; three 1s. 1½d. Wright's pearl ointment; two 1s. 6d. Bishop's eff. nuxvomica; eight 2s. 9d. Eno's granules; two 2s. 9d. Butler's ginger and camomile; one 4s. 6d. hydrolin (hydrated oil); two 2s. 9d. Wooley's candy; three 1s. Eno's sol. roses; six 1s. 1½d. senegambiana pills; two 2s. 9d. ditto; seven 2s. 9d. Huggin's ozonopaper. Bowman, Chemist, Douglas Man.

Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

How to make concentrated aromatic waters, miscible with water, at half-price; formula 1s. 6d. F. Hornblow, Sidbury, Worcester.

Chilblains.—The "Canadian Cure," acts like magic, cleanly, economical, profitable; recipe, with 12 sample boxes (retailing 2d. each), post free 2s. Glycerine cream, infallible remedy for chaps, frost-bite; keeps hands soft and white. Licorice and glycerine, pleasant, efficacious. Cough-syrup, very profitable, honestly recommended. Recipes 7d. each, above 3 for 1s. 6d., with 1st 400 post free. Tom Brooks, Chemist, Hornsey, N.

Drugs and Chemicals.

½-oz. mosch. gran. opt., one 11s. Congreve's; what offers? 82/4.

Poppy-heads, to clear, large 12s. 6d., medium 6s., small 2s. 6d. per 1,000; bag 6d. Connor, Doncaster.

1 lb. sodii bromid, 2s.; 3 lb. potiss iodid ang., 10s. 6d. 1b.; 7 lb. potass bromid, 1s. 4d. 1b.; 4 lb. bismuth carb., 7s. 1b.; 2 oz. cocain hydrochlor., 21s. oz., 3s. 3d. drachm: a 1 perfect; carriage paid. Bowen, 44 Thorne Road, South Lambeth, London.

Shop Fittings.

Entire stock and fittings of small business for sale, immediately, about 50l. 82/4.

Cheap, two pear-shaped carboys, 8 and 4 gallons each. R. Stephenson, 84 Barkerend Road, Bradford, Yorks.

Marble mortars, with pestles, 24 in. diameter, 30s.; 12 in. ditto; composition ditto, from 1s. each. Natali, 184 Aldersgate Street.

Counter-case, bent glass, similar to Maw's A 13, silvered back, 1 ft. 11 in. long, 1 ft. 10 in. wide, tray inside, opens at back. Offers. "Pharmacist," 1 Spital Street, Dartford, Kent.

Chemist's shop-fittings for sale, together or separate, great bargains; they comprise counters, dispensing-screen, drawers and shelving, bottles, carboys, counter and wall cases, &c., all in first-class condition. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Ten 3-lb. maroon jars, dome covers, gilt mouldings, labelled, inside linings, and 12 8-oz. ditto, 3l. 10s.; 1 specie-jar, 3l. high, with gilt glass cover, scroll label, 14. 15s.; soda-water stand, marble top, 24 in. by 20 in., 2l. 5s.; 11 new specie-jars, 12½ in. high, with glass covers, 2s. 6d. each; new plate-glass counter-case, ebonyised, 4 ft. by 2 ft. by 9 in. high, trays, mirrors on flaps, 4l. 10s.; several nests of drawers; shop rounds. W. Hawke & Son, Wild Court, Great Wild Street, London, W.C.

Second-hand shop-fittings, show-cases, shop-rounds, specie jars, carboys, pill-machines, utensils, and every necessary for chemists commencing or fitting up branch shops, at half the usual prices; state requirements or call. Natali & Co., 184 Aldersgate Street, London, nearly opposite Maw's.

Bargains for sale; all articles at reduced prices in consequence of removing to more extensive premises, which are 212 Old Street, almost opposite present premises. Entire fittings for chemist's shop; also large stock of drawers, shelving, counters, wall-cases, toothbrush-cases, dispensing-screen, desks and cases, pill-machines, specie-jars, bottles, ointment-jars (pink and blue), mortars, outside lamps, glass show-stands, and every requisite for chemists fitting up; send particulars of requirements; also dispensing screens, 6 ft., 7 ft., and 8 ft., with silvered plate-glass centres, cases at each side, with tablet on top "Dispensing Department." Sketches and prices will be forwarded by Elkanah Natali, 207 Old St. (Shoreditch end), London, E.C.

Miscellaneous.

Fine old violin, sweet tone, played for years, price 45s. Fletcher, 11 Town Hall Street, Grimsby.

Spendid mahogany materia medica cabinet, for Major course; 190 specimens. Offers. Woolham, High Street, Whitechurch, Salop.

Fourteen pairs forceps (dental), in good condition, all useful kinds, several nickel-plated. Offers. "Dentist," 1 Spital Street, Dartford, Kent.

Powerful microscope, with 5 objectives, accessories, and slides, in mahogany cabinet, perfect condition, 4l. 10s.; also student's ditto, with 3 powers and slides, 18s. Halford, Chemist, Hockley, Birmingham.

Surplus brown Turkey sponges, flat, suitable for working ships' cargoes or cutting up, 3s. 6d. per dozen, post free; also surplus honey-comb, about 400 pieces, fair sizes, retail 6d. and 9d., 5s. per dozen, post free. Robinson, Chemist, Myton Place, Hull.

WANTED.

"Year-book of Pharmacy," 1878-80. 210/72..

Nest of drawers. Carpenter, Barnham, Somerset Cupiss balls; send lowest cash price. Griffith, Chemist, Canterbury.

A disarticulated skull; lowest terms. C. W. Botwood, Dartford, Kent.

Complete set second-hand hooks for Minor exam.; state price, lowest. 82/7.

50-gall. oil-tank, in good condition; state price. "Oil," 181 Snargate Street, Dover.

Good microscope. State full particulars and price to Gilbert, 70 Fargate, Sheffield.

Second-hand, 4 three or four gallon carboys. H. W. Gartside, Belmont Place, Middleton Junction, Chadderton, Oldham.

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NEW YORK and LONDON,

MANUFACTURING CHEMISTS,

MANUFACTURERS OF ALL VARIETIES OF

MEDICINAL
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SURGICAL **PLASTERS** IN RUBBER
COMBINATION

(PERFORATED AND PLAIN), AND ISINGLASS AND MUSTARD PLASTERS.

ALSO MOIST ANTISEPTIC DRESSINGS & ABSORBENTS.

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We are now preparing Mustard Plasters after an entirely New Process.

Mustard Plasters have always given some trouble to both Physician and Pharmacist, by reason of decomposition from age, thus becoming inert. After years of careful manipulation we have been able to overcome this difficulty, and the Mustard Plasters prepared by us are guaranteed in every way.

ON APPLICATION WE WILL MAIL TO ANY CHEMIST'S ADDRESS A SAMPLE OF OUR

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A comparison of which with any other brand will show them to be much superior.

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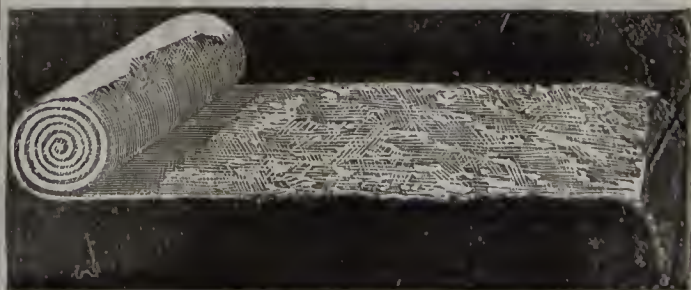
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ABSORBENT COTTON IN EVEN SHEETS
Rolled with Tissue Paper between them to prevent felting.



Cotton in this form is as easily applicable as an ordinary cloth bandage.
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Supplied in all sized Packets, from 1/2 oz. to 1/2 pound.

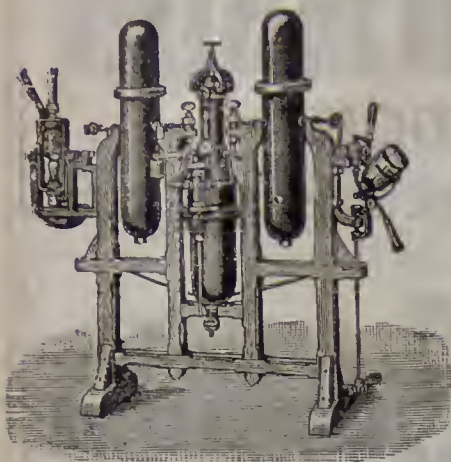
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INDISPENSABLE TO CHEMISTS. THE ONLY PRACTICAL SODA WATER MACHINE.

Self-working by Chemical Action. No Skilled Labour.
NOT LIABLE TO GET OUT OF ORDER OR NEED REPAIRS.
Produces the Purest Aërated Water made.

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

COUNTY LABORATORY, 30 BROWNLOW STREET, LIVERPOOL, October, 1889.
I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescent water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way.
J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.
GENTLEMEN,—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescot Street and Tuebrook, Liverpool. I have inspected the patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours,
G. ESTOUCOURT, F.I.C., F.I.

Messrs. A. LOZÉ, & CO., LIMITED.

Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly.
ROBT. J. GOW, F.C.S.

DITTON, 10th April, 1890.

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SODAWATER MACHINERY

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BRATBY & HINCHLIFFE LTD

ANCOATS 146 MINORIES

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All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving our works.



PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

SELTZOGENES.

1	2	3	4	5	8 pint.
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HAY'S

SOLUBLE ESSENCES

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ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE &c.

HOP ALE AND GINGER ALE ESSENCES.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

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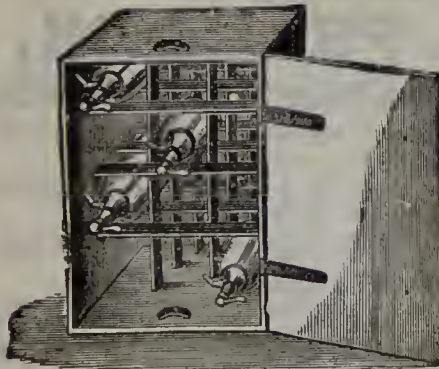
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ESTABLISHED 1840.

37 & 38 MINORIES, LONDON, E.C.



MANUFACTURER OF
Cases of every description for Home use
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Wine Laths, Oak and Deal.
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FOR THE EFFECTIVE TREATMENT OF

Disorders of the Organs of Respiration and Digestion,
Catarrh of Larynx and Stomach, the Enlargement of Liver and Spleen,
Abdominal Plethora, &c.

TO BE OBTAINED THROUGH ALL WHOLESALE HOUSES.

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[2]

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ARE YOU GIVING A PARTY THIS WINTER?

If so, you will want something for your guests to drink. They will appreciate your kindness if you provide some Temperance Wine made from our Essences—Orange, Lemon, Raspberry, Ginger. "As delicious as the fruit."

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Most refreshing at children's parties and all social gatherings. Non-intoxicating, pure, and very refreshing.

Try a few dozen; a good assortment of advertising matter is sent out with each order.

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IS MANUFACTURED SOLELY BY

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Who will be pleased to send a sample FREE to any address in the United Kingdom on application.

A box of 25 (as in margin) for 5/, or a box of 50 for 9/, on receipt of Postal Order or Stamps, carriage paid.

The only Manufacturers of the CELEBRATED "ROYAL CHARTER" TOBACCO.

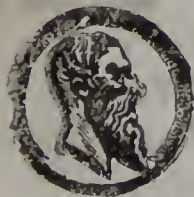
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"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and $\frac{1}{4}$, $\frac{1}{2}$, 1 lb. Tins only.



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ESTABLISHED 150 YEARS,

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EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

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The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. 2s. and 5s. Tins.

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Delicious Custards without Eggs. In Boxes, 2s. 6d., and 1s. each

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Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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Make a Delicious and Nutritious Jelly. In $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

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Yours faithfully,
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Are imported in bottles, and used in the treatment of CHRONIC GASTRIC CATARRH, HYPEREMIA of the LIVER, GALLSTONES, CHRONIC CONSTIPATION, DIABETES, RENAL CALCULI, GOUT, and DISEASES of the SPLEEN.

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In small and frequent doses it is an efficient *diuretic*, but as an *aperient* it should be taken *before breakfast*, in doses of from 1 to 2 teaspoonfuls, dissolved in water, preferably warm. To increase the *aperient* action of the Natural Carlsbad Mineral Water, a teaspoonful of the Salt, previously dissolved in a little hot water, should be added.

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(AND OF ALL CHEMISTS).

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The Cigarettes of the following Firms at List Prices:—Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Cope, and the leading Egyptian and Turkish Houses.

BRITISH CIGARS from 4s. to 20s. per 100. All carefully selected and well matured. The largest and most varied stock in the United Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other hard Tobaccos; also Flakes, Shags, Virginias, Cut Cavendish, and every description of plain and fancy Cut Tobaccos of standard quality at lowest prices.

Tobacconists' Fancy Goods and Smokers' Sundries of every description at current rates.

Carriage paid on parcels from £2 upwards to any station in the United Kingdom. SEND FOR DETAILED PRICE LISTS.

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Cannon Street and Fore Street, BIRMINGHAM.

ORANGE & LEMON PEELS (DRIED AND FRESH).

This SEASON'S PEEL is now ready, and we are prepared to supply FRESH ORANGE and LEMON PEELS specially cut, free from pith, and in small shreds (about 1" x $\frac{1}{16}$ "), in a condition most favourable for the manufacture of the Official Tinctures.

Samples (as soon as in hand) will be sent free on application.

CHAS. SOUTHWELL & CO.
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A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of

HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

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Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

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SOLE INVENTORS &
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CAFFYN'S LIQUOR CARNIS

Which are the result of Practical Examination by those qualified to express an opinion.

"I have much pleasure in reporting that large quantities of Caffyn's Liquor Carnis have passed through my hands during the year, and I have taken frequent and full opportunity of submitting it to a thorough chemical and physical examination. My experiments enable me to state that *Caffyn's Liquor Carnis* is quite a unique preparation, having a special value both as a food and medicine, which renders it far superior to ordinary meat extracts. The points in its favour which together place it in a high position among meat foods may be thus enumerated:

"1. It is very rich in albuminoids, or flesh and tissue forming matter.

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"3. It contains the iron of the blood in its natural colloid form.

"4. Odour and taste are agreeable.

"5. It keeps well, maintaining its properties unaltered for an unlimited period.

"The fact should be emphasised that most meat extracts are simply tasty stimulants, often excessively salted, the chief agents of nutrition—the albumens—having been removed by heat and coagulation; whereas *Liquor Carnis* contains all the albumens and extracts of the meat in their natural state, and is thus a *perfect meat food*."

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TWO SHILLING BOTTLE;
Double the above size, 3/6.

The Journal of Laryngology and Rhinology says:—

"We have tried the preparation, and can speak highly of its nutritive value. Moreover, it is readily assimilable and not unpalatable. We consider it a preparation of undoubted value in cases of Wasting Disease and of Debility."

A VERY VALUABLE FOOD

"I have been using your *Liquor Carnis* now for some time, and I find it a very valuable food, and it is well liked by patients. I found it especially useful in cases where vomiting or irritation of the stomach occurs, and in the Fever Cases the patients could tolerate it when other forms of nutriment were rejected. As it contains a great amount of nutriment in so small a bulk, I look upon it as a most valuable article for the sick."

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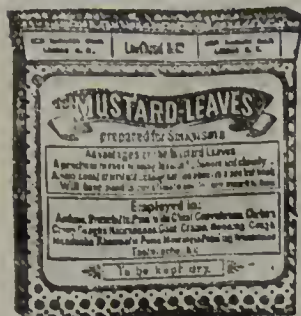
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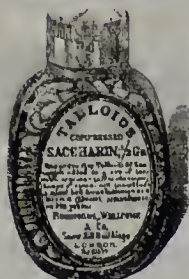
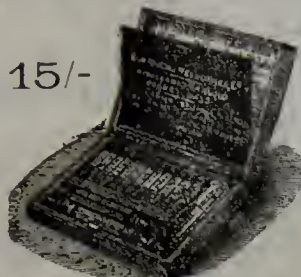
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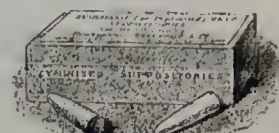
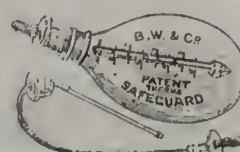
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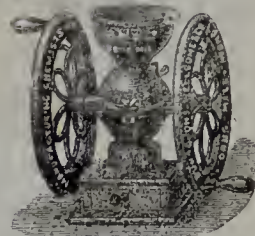
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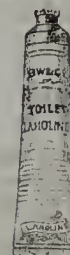
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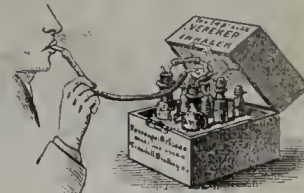
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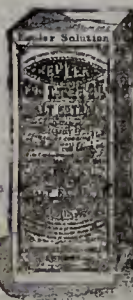
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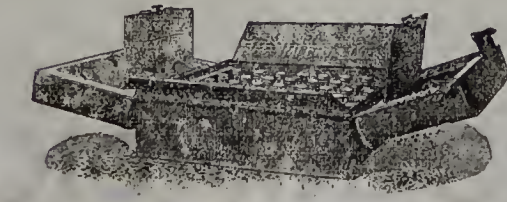
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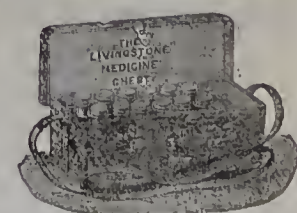
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ESTABLISHED 1859.

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PUBLISHER'S NOTICE.

OUR Winter Issue will be published next week, and will be a very handsome and attractive number, filled with interesting matter and freely illustrated. Wholesale and manufacturing firms should not be absent from its pages. Any who have not sent a circular for insertion, or have not engaged space, must communicate with us immediately if they wish to have an announcement in this issue. Eleven thousand copies will be circulated, the recipients being the pick of the drug trade in the United Kingdom, in Australasia, Canada, India, South Africa, South America, &c. Next Wednesday is the latest day for receiving copy. This does not apply to advertisements for the Supplement, which will be received up to Friday morning's first post, as usual.

THE BRITISH PHARMACOPŒIA ADDITIONS.

COPIES of this work will be sent to any chemist, from our office, post free, on receipt of the published price, 1s.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

NEW COMPANIES.

SCARBOROUGH NEW HYDROPATHIC COMPANY.—Capital, 20,000l. in 5l. shares. The object for which the company is formed is to carry on the hydropathic establishment situate at West Bank, Seamer Road, Scarborough. The first subscribers are:—John H. Phillips, Scarborough, gentleman; William Birdsall, Scarborough, gentleman; Mark H. Smallwood, Scarborough, bank manager; Robert B. D. Wells, West Bank, Scarborough, hygiene practitioner; Pantland Hicks, Scarborough, shipowner; George R. Marshall, Scarborough, bookseller; and George Cail, Scarborough, book-keeper. The above take one share each.

TONIC IRON ALE COMPANY (LIMITED).—Capital 1,000l. in 1l. shares. Registered without articles of association. The object of the company is to acquire the business, machinery bottles and stock of Messrs. Douglas & Co. for the purpose of manufacturing tonic iron ale and medicated mineral waters. The following are the first subscribers and take one share each:—John Dewar, 28 Finsbury Circus, surgeon; William M. Roope, 30 St. Leonard Terrace, Chelsea, insurance broker; Alfred Leach, 41 Charlwood Street, S.W., physician; Annie E. Dewar, 132 Sloane Street, S.W.; Douglas Dewar, 132 Sloane Street, art student; Lilian Dewar, Kingussie, N.B.; Harold D. O'Donnell, 59 Old Gravel Lane, E, surgeon.

C. E. GITTINS (LIMITED).—Capital, 5,000l., in 5l. shares. Object, to continue the business (hitherto carried on by C. E. Gittins) of filter manufacturers, and to manufacture filtering and purifying materials for the filtration and purification of water, &c. The first subscribers, taking one share each, are—James H. C. Dalton, M.A., B.C., Trinity Court, Camberwell Road, S.E., gentleman; John S. Underhill, Trinity Court, Camberwell Road, S.E., secretary Marylebone Constitutional Union; Henry M. Tickell, M.A., Trinity Court, Camberwell Road, gentleman; Charles Platts, M.A., Trinity College, Cambridge, university local lecturer; Thomas Platts, 25 Richmond Crescent, London, secretary of a public company; Walter H. Murray, 35 Margrave Gardens, West Kensington, secretary of a public company.

KENT ASSOCIATION OF MINERAL-WATER MANUFACTURERS AND TRADE PROTECTION SOCIETY (LIMITED).—This company was registered at Somerset House on January 17, and is limited by guarantee. The objects are to raise a fund by annual subscriptions, entrance fees, &c., to protect the bottles, &c., or trade-marks of members from being used or dealt with by any person or persons not having lawful authority, and to punish by fines or prosecution all persons found so doing. The subscription of each member is 1l. 1s. per annum, payable in advance, and each member is liable for that amount in the event of the winding-up of the company. The following are the guarantors:—S. A. Elms, mineral-water manufacturer, Dover; Patrick W. J. Mackenzie, mineral-water manufacturer, Dover and Folkestone; S. G. Philpott, mineral-water manufacturer, Ramsgate; Henry Shaxley, mineral-water manufacturer, Ashford; William J. Bryant, mineral-water manufacturer, Sevenoaks, Kent; John W. Marshall, mineral-water manufacturer, Ashford; D. T. J. Lyle, mineral-water manufacturer, Maidstone.



THE NORTH AND NORTH-WESTERN CHEMISTS' ASSOCIATION will hold a convivial and musical meeting at the Railway Hotel, West-End Lane, on Thursday next at 8 P.M. Visitors introduced by members will be welcome.

CRICKET DINNER.—The eleventh annual dinner of the S. M. S. & T. Cricket Club took place at the Holborn Restaurant last Friday evening, and the members, with their friends, had a very good time.

CHEMISTS' ASSISTANTS' ASSOCIATION.—The next meeting will be held at 103 Great Russell Street, W.C., on Thursday, January 29, when a paper on "The Glucosides," will be read by John C. Umney. Chair to be taken at 8.30 P.M.

ENTERTAINMENT.—The staff of Mr. James Pascall, the manufacturing confectioner of Blackfriars Road, had a substantial tea and a pleasant musical entertainment on Saturday, January 17, in the schoolroom connected with Surrey Chapel, which was kindly lent for the occasion. Mr. Pascall took the chair, and several speeches, manifesting good feeling between himself and his employes, were made, but the evening was principally occupied with songs, choruses, recitations, &c., revealing considerable latent talent.

THE FOOD AND DRUGS ACT.—Mr. George Eade, of Goswell Road, speaking at the St. Luke's Vestry meeting on Tuesday, objected to the proposal by the Vestry of Bermondsey to legalise the adulteration of milk by compelling milk-vendors to label their churns "milk and water." If he purchased milk, he expected to get milk, and not milk and water, and it was no satisfaction to him that the churn was labelled as described. If the vendors were made to say to what extent the milk was adulterated, it might be better; but he considered it would be better still if they kept to the present plan of fining everybody who watered milk to whatever extent. (Hear, hear.) Dr. Clift and Mr. Blake thought similarly; and it was decided not to support the Bermondsey Vestry in their proposal as stated.

THE STOLEN PLATINUM.—At Clerkenwell Police Court on Wednesday, John Bruce, aged 63, an optician in Clerkenwell Road, was charged with feloniously receiving a quantity of platinum, value 300*l.*, the property of Messrs. Dunn & Co., of the Sterling Chemical Works, West Ham. Mr. St. John Wontner appeared for the prosecution, and in opening the case said that about the beginning of October last the prosecutors discovered that something like 200 oz. of platinum had been stolen from their works. The police were communicated with, but nothing came of their inquiries. A circular was sent out to the trade, giving an account of the loss, and describing the article, in which an acid had, by accident, been used. About a week ago information was received from Messrs. Johnson, Matthey & Co., assayers, that a quantity of platinum had been offered to them, and that, on analysis, the acid described by Messrs. Dunn had been discovered in it. In consequence of that communication the police were instructed, and Messrs. Johnson, acting with them, had negotiated with the prisoner, who was the person that had offered the platinum to Messrs. Johnson. He had left a sample with them, but said he was prepared to supply 100 oz. In explanation of his possession of it, he said he bought it of an occasional customer, and had paid 250*l.* for it. Messrs. Johnson ultimately communicated to the prisoner the fact that the platinum had been stolen from Messrs. Dunn's works, and invited him to deposit with them the 100 oz. he said he possessed. The prisoner professed his readiness to do that, and an appointment was made for that purpose, but not kept by him. Messrs. Johnson then sent a man to the prisoner to get the platinum, and the prisoner, it would be shown, gave it up, and it was now in possession of the firm. After that he was visited by an inspector in charge of the case, and asked to give an account of his receiving the article. He could not give the name and address of his customer, but gave a description of a man he said he had bought the

platinum from, and to whom he had paid 250*l.* Asked if he had paid the money by notes, gold, or cheque, he said in gold. He was afterwards charged by the prosecutor, and made no further explanation. Mr. Wontner added that the facts so far pointed to a serious case of receiving valuable property well knowing it to be stolen, though they might be capable of explanation by the prisoner. Some evidence having been given in corroboration of Mr. Wontner's opening, a remand was asked for and granted, the magistrate consenting to accept bail in 500*l.* for the prisoner's reappearance.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

MR. W. H. PULLEN, of Leamington, has resigned his position as a vice-president of the Midland Counties Chemists' Association. Mr. Pullen has taken this course in consequence of his retirement from business as a pharmacist. His withdrawal from the Association will be a considerable loss to the pharmacists of the Midlands, in whose affairs he has always taken a warm and active interest.

BRIGHTON.

NEXT THURSDAY.—We are asked to remind Brighton chemists that next Thursday there is to be a conference with Mr. Carteighe as chief speaker, a dinner with Mr. Carteighe as guest, and a ball with Mr. Carteighe as patron—all for their instruction and entertainment. The ball will be held at the Pavilion; reception at 8.30, dancing to commence at 9.

LIVERPOOL.

SCARCITY OF NURSES.—Evidence of the amount of sickness in Liverpool may be gained from the fact that it is very difficult to obtain the services of a professional nurse at any price. At one of the houses forty applications were refused in one day.

CHEMISTS' ASSOCIATION.—The annual meeting will be held on Thursday, January 29, at 8 P.M., at the Royal Institution, when a resolution will be moved that in future the hour for meeting be 7 instead of 8 P.M. as formerly. Seven members of council will be elected, and the annual report will be presented, after which the president will deliver a short address inaugurating the new session.

PHARMACEUTICAL STUDENTS' SOCIETY.—The first annual dinner was held at the Faulkner Restaurant, Lord Street, on Thursday, January 15. Mr. Wyatt, jun., president of the society, was in the chair. There was a good attendance, among those present being Mr. Edward Evans, Mr. W. P. Evans (of the firm of Evans, Sons & Co.), Mr. Overton (Sumner & Co.), Dr. Larkin, and others. It was satisfactory to see that the senior association gave its cordial support to the juniors, Dr. Symes, president, Mr. Conroy, vice-president, and Mr. Ward, secretary, of the Liverpool Chemists' Association, being there. The dinner was well served, a few speeches and some excellent singing bringing the festivities to a close about 11.30 P.M.

MANCHESTER.

"PINK EYE" continues to play havoc amongst the horses of Manchester and of Lancashire generally. Pharmacists have been called in to aid the veterinary surgeons in effecting a cure. Quinine, it is said, has been in considerable demand, and ground liquorice given warm in gruel. While benefiting in one way, our wholesale drug-houses have in another way suffered considerably by the disease, the mortality amongst the horses having been very heavy.

CARBOLIC-ACID POISONING.—Two cases of poisoning by taking carbolic acid have occurred in Lancashire within the past three weeks, the second of the two being that of a man named Nathan, who was found dead in bed in the White Bear Hotel, Piccadilly, last Saturday morning. On the dressing-table in the bedroom there was found a bottle of carbolic acid, little more than half-full, and on a chair by the bedside was a glass containing a few drops of the same liquid. On a piece of paper stuck on the bottle appeared the words, "Carbolic Acid, for Disinfecting Purposes."

BEAUCHAMP AND BEECHAM.—One of our evening papers gives the following, which we reproduce, but not without suspicion that it has seen the light before:—"Americans can scarcely be expected to be acquainted with the peculiar pronunciation of the names of some of our noblemen, and of various families of ancient lineage. Lord Beauchamp, it is said, was recently at Florence in conversation with a sprightly young lady from America, who evinced unwonted interest in his lordship's property and residence. He gave his name, which, in select circles, sounds like the cognomen of a certain tradesman, whereupon she exclaimed, 'Ah! I suppose you made all your money by your celebrated pills!'"

MAYORAL HOSPITALITY.—Mr. Benjamin Robinson, Mayor of Salford, entertained a large and brilliant company at a banquet in Salford Town-hall on Tuesday. In this and other ways Mayor Robinson is showing himself worthy of the high honour which the council of the county borough have conferred upon him for the second time. Mrs. Robinson continues to render him valuable help in attending to the social side of his official duties. Her numerous "at homes" have been well attended, and have passed off very pleasantly. The company on Tuesday night included Mr. Geo. S. Woolley, Mr. A. H. Bullock (a member of the Salford Council), and Mr. T. R. Jeans, pharmaceutical chemists; Councillor R. Gibson, of Manchester, medicated-lozenge manufacturer; and Mr. J. Carter Bell, public analyst.

UNQUALIFIED MEDICAL MEN.—Some weeks ago Mr. Smelt, the deputy coroner, took occasion to make some scathing remarks about doctors who give advice and medicine for sixpence. The advice and medicine, he said, in effect, were too cheap to be good. In the course of the hearing of some cases in the end of last week he referred to another branch of the same subject—viz., the large number of unqualified men who are practising as doctors in Manchester, and said that with regard to one of the cases he proposed to bring the facts under the notice of the Registrar-General. There are, it is said, hundreds of unqualified assistants practising in this city. In some correspondence which has taken place in the daily papers it has been suggested that all corporations and local boards should keep at their offices a copy of the Medical Register, so that the public may know who are and who are not qualified.

PHARMACEUTICAL ASSOCIATION.—The monthly meeting of this association was held on January 14. Mr. Harry Kemp, who occupied the chair, explained that there was no business on the agenda, and he invited members to introduce any subject of interest. After a short conversation with regard to certain cases of alleged adulteration, in the course of which the opinion was expressed that on the whole the drug trade is remarkably free from cases of adulteration, the chairman inquired whether it might not be wise on the part of the association to get up a petition, or rather a memorial, in favour of

THE PHARMACY ACTS AMENDMENT BILL.

The chemists and druggists of Manchester and the surrounding district had already supported the Bill by the vote they gave on the occasion of Mr. Carteighe's visit, but he thought they might again put their shoulder to the wheel by getting the members of the trade in Manchester and the district to send up a memorial to the Pharmaceutical Society, urging them to go on with the Bill. Although quite in favour of the Bill as it stood, he should have preferred to see the hogs company business handled. However, as Mr. Carteighe had given the assurance that it was quite possible that something of the kind might be done in committee, he was quite satisfied to leave that matter where it was. Mr. George S. Woolley said that they might rest assured that if

anything could be done in that direction, Mr. Carteighe would do it. It was merely a question of what was possible. Of course if there was anything mooted that was supposed to be antagonistic to the stores, they knew what an immense amount of opposition would be brought to bear against it at once, and with the power the friends of the stores had in the House of Commons, they would ultimately swamp any legislation that might be proposed by the Pharmaceutical Society. He added that as the first part of the Session would be occupied with Government business, they need not be in any particular hurry to take action. Some further conversation followed, and on the motion of Mr. Smith (Radcliffe), seconded by Mr. Booth (Salford), the council was instructed to prepare and forward to the Council of the Pharmaceutical Society a memorial in favour of the Bill.

BEECHAM'S PILLS.

Mr. Arrandale said a great many letters had appeared in *THE CHEMIST AND DRUGGIST* about Beecham's pills. There seemed to be some doubt as to the legality of selling them in broken boxes, and he could not gather from the letters in last week's issue whether it was legal to do so or not, although he saw an editorial foot-note to one of the letters stating that it was legal to open and re sell the contents of a packet of stamped medicine provided the re-sales were not in boxes, &c. Now, were they to understand by that, that if they sold Beecham's pills in broken bulk, that they were to be put up in paper? The chairman said they must not be put into boxes or sealed packets. That had been definitely settled by the excise authorities. But the latest decision with regard to breaking bulk—and to his mind the most absurd—was that the excise authorities said you might sell a packet of Pritchard's teething-powders in single powders, but must not sell them two together. Mr. Booth said he thought that was mentioned in Alpe's book. Mr. Arrandale said he had been compelled to sell such things as Beecham's pills and Fenning's powders in broken bulk, and they would be surprised at the quantity he sold; but he had been accustomed, for the sake of convenience, to put them into small boxes. Mr. A. Blackburn said that while they were discussing that subject he might state that if, on a doctor's prescription, they sold Fellows' syrup alone, it had to be stamped. That was the result of a correspondence which had taken place with the Board of Inland Revenue. If anything else was ordered with it you need not stamp it; but if ordered alone you had to stamp it according to its value, whether the bottle from which it was taken was stamped or not. The discussion was brought to a close with Mr. Woolley's remark that "the whole thing seemed to be in a gigantic muddle."

THE B. P. ADDITIONS.

Mr. W. Kirkby (Assistant-Lecturer in Materia Medica and Pharmacy at Owens College) inquired whether anyone proposed to bring under notice the Additions to the Pharmacopœia, and being invited to say something on the subject himself, he remarked that it was worthy of note that this was the first time that we had had the pharmaceutical chemists recognised through their Council in the preface to the Pharmacopœia Addendum. The processes for making the tinctures he regarded as a distinct advance in pharmacy, as percolation was now used in the United States Pharmacopœia, and it was not the maceration and percolation of the late Pharmacopœia. It was also well to know that we had a form for dry extract of euonymus, especially as this had been mixed with barium salts, which of course were deleterious. We now had acetanilide, antipyrin, phenacetin, recognised in the Addendum, and also we had a formula for a preparation we could not make now—hydrous wool-fat. Altogether he thought it was a very noticeable production. The chairman said one thing he was wondering was whether the word "lanolin" was simply a trade-mark, or whether the article was patented. If it was simply a registration trade-mark he supposed it was perpetual. Mr. Woolley said it had been stated that the mixture of water with wool-fat was the subject of a patent. What he objected to was the Pharmacopœia occupying such a following position, and not taking the lead. The chairman said he did not know whether it was not a retrograde step to recognise these proprietary things officially in that way. Mr. Kirkby said he

agreed with the chairman that it was a step in the wrong direction to put these patented things into the Pharmacopœia, and he thought it was also a mistake to put in some preparations on so short a trial. With regard to some of them, the medical men were not even agreed as to the dose. He thought these things ought to be submitted to tests in pharmacological laboratories before being put into the Pharmacopœia. The Chairman: The question is whether the human system is not the best test for them, and such a test as would come from a committee of therapeutists. The Medical Council ought to test these things before adopting them.

IRELAND.

FIRE.—At Dublin on Monday morning last the Ringsend Bottle-works were damaged by fire to the extent of 300l.

AERATED WATERS IN BELFAST.—The manufacture of aerated waters, says the *Belfast News Letter*, continues on a large and increasing scale. The local manufacture has now developed into twenty-four establishments, some of whose products are known and signally appreciated in every part of the civilised world. When one can mention as a fact that some four of the concerns employ no less than a total of 2,000 hands, it will be seen that the industry is very valuable in more ways than one. Owing to the large support the annual consumption of new bottles is very considerable. Some of the larger firms use about 15,000 gross; and the total is estimated to amount to 54,000 gross, equal in round numbers to 7,776,000 single bottles, which, if placed end to end, would cover a line 1,105 miles long. These facts will give some idea of the magnitude of this important trade, and, great as it is, an increase might easily be effected were it not for the obstacles thrown in the way by the carrying companies. The railway companies fix their minimum charge for tonnage rates at eighteen dozen (by weight 500 lbs.) and if only six dozen are sent they charge 50 per cent. more carriage; whereas if the minimum were fixed at six dozen (by weight 168 lbs.), business would be greatly benefited, as many customers are willing to order six dozen who would not think of taking eighteen. It is pleasing to observe that, notwithstanding all opposition, the trade continues so very prosperous, and it is reckoned that the amount paid in wages and salaries is not less than from 60,000l. to 80,000l. annually.

THE CHEMISTS' AND DRUGGISTS' ASSOCIATION.—The annual meeting of the Dublin branch of this association was held on January 16, at No. 16 Upper Sackville Street. Mr. McNeight, President of the Association, occupied the chair, and Mr. Joseph Doyle, secretary, read the annual report. This report was of a congratulatory character, and referred mainly to the Amendment Act, the subject-matter being fully dealt with by Mr. McNeight in his speech. The honorary treasurer, Mr. Charles Johnston, submitted the financial report, which showed that the association commenced the year with a balance of 65l. 7s. 7d. Forty-six subscriptions of 1l., 26 at 15s., 24 at 10s., 28 at 5s., 5 at 1s., 1 at 1s. 6d., and 1 at 2l. 2s. were received, making at total income of 152l. 6s. 1d. Payments amounting to 137l. 10s. were made, leaving a balance of 14l. 16s. 1d., not nearly enough to free the association from debts, which represented in the aggregate a total of 56l., but which could be practically cleared off if a number of outstanding subscriptions, due chiefly by assistants, were paid. Most of the principals had already discharged their liabilities. The chairman, in moving the adoption of the report, said they had passed through all their difficulties and overcome all the obstacles which had lain in their path in the most satisfactory manner. They had to congratulate themselves on their present position, as compared with what it was this time last year. He referred to three or four points connected with the text of the Amendment Act of 1890, the first of which was the want of provision for assistants of over fifteen years' standing and principals who had commenced trading since 1875. This had occasioned some dissatisfaction among those concerned, but it should be borne in mind that, save this point, everything else of moment had been gained. First in importance was the continuation of the grade, at which the Pharmaceutical Society, by their actions, aimed what they considered a *coup de grace*. They struggled manfully to the last, and only

capitulated when they found themselves powerless against their opponents. The representation of druggists on the Council was another bone of contention, but neither lords nor commoners would hear of money being paid to the Pharmaceutical Society except the subscribers had a voice in its circulation. When at length the Council found this plank of their platform had given way, they offered to compromise matters by allowing the perpetuation of the disputed grade on condition that the sanctity of the council-chamber remained unbroken by the presence of a druggists' representative. At this stage of affairs the position of the chemists was too secure for half measures. They stood firm to their demands, and in the end got what they wanted. (Applause.) The title of "chemist and druggist" was the next thing of which the Council sought to deprive them, but in this, as in their other efforts, they were frustrated, and now all those who used the title in the past were free to continue it. Mr. McNeight also stated that they had eliminated from the Act of 1875 the power of the Pharmaceutical Society to create a second grade called "chemist and druggist with power to compound prescriptions," and expressed his surprise at the opposition of the Council to what was the root of all their trouble, and which, if retained, would have been a most fertile source of confusion. Reference was also made to the provision for apprentices passing from the lower to the higher grade, and the speaker said that the only thing on which the association had to give way was the registration without examination of principals in business since 1875; but the test had been made so simple that nobody in the habit of handling poisons could possibly fail in it. Mr. Wm. Alexander seconded the motion, and the report was unanimously adopted. Mr. Reynolds moved, Mr. Woods seconded, and it was resolved, that the best thanks were due to the committee for their services in connection with the Pharmacy Act, 1890. Mr. Boyd moved that the standing orders be suspended as regards the election of committee, and that the same committee be elected to continue in office during the current year. Officially, said Mr. Boyd, they were bound by rule 9 to elect by ballot a new executive committee, and supply to each member a voting paper for the purpose of recording his vote. Under the present circumstances it was more expedient to dispense with the formality. The question now was whether the association should exist or dissolve. There was, as stated by the hon. treasurer, a considerable deficit, which might, perhaps, be liquidated by sending round the hat; but he doubted very much the wisdom of the latter course, and was of opinion that the better plan would be to keep on the association for another year, and, by working it on strictly economical lines, be then able to discharge in full its liabilities. To do this, however, required that outstanding and present subscriptions should be at once forwarded to the hon. treasurer. He agreed with their president that the association had nobly performed its duty. As Mr. McNeight had said, it was not all pleasure trying to interest one and another in the Poisons Act, a subject of no earthly moment to persons who, like the Earl of Erne, had no previous acquaintance with the subject, but upon whose "coaching" everything depended. The task was not lightly accomplished, and they certainly owed much to the painstaking attention of the right hon. gentleman. Mr. Boyd complained bitterly of the small attendance of assistants, his own establishment illustrating their want of interest in the association. He expressed gratification at the beneficial changes which gave to the trade a recognised status equal to the pharmaceutical chemist, save as regards the compounding of prescriptions, an adjunct by no means to be coveted. Mr. Greenfield seconded the motion, which was adopted. On the motion of Mr. Wm. Alexander, seconded by Mr. Boyd, a cordial vote of thanks was passed to the president.

CHARGE OF ABDUCTION AGAINST A DRUGGIST.—At Dublin on Friday, January 9, in the Southern Police Court, Henry W. C. Harvey, a respectably-dressed young man, of 195 Great Brunswick Street, described as a druggist, was charged with having on the previous Wednesday unlawfully abducted and enticed away Annie Clowry, aged 15 years, against the will and consent of her parents, John and Alicia Clowry, 26 Golden Lane. After evidence the accused was remanded for a week on bail, as the girl Clowry was then

missing. On January 17 the case again came up for hearing. In her evidence Annie Clowry stated that she met the prisoner by accident at Westland Row. They went to a public-house together, where she had some wine, and afterwards Harvey took her to Mrs. Wood's house at Portobello Road, where she had some more wine. After taking the second glass of wine she felt dizzy and queer. All that she remembered after was being taken in a cab somewhere, and when she awoke the next morning she found herself in a strange room with Harvey at an hotel near Marlborough Street. She parted from him at Marlborough Street, and went to her uncle's at Clane, as she was afraid to go home. Harvey gave her two two-shilling pieces. Mr. Byrne, for the defence, argued that the evidence did not show the girl had been taken away against her will, or even induced to go by anything offered by the prisoner. He submitted that the offence was only a misdemeanour, and that Harvey was entitled to bail. The magistrate, however, thought the case was too serious a one for bail, which he refused, and committed the prisoner for trial. Mr. Byrne asked to have the depositions forwarded to the Crown Office to enable them to appeal to the Queen's Bench.

SCOTLAND.

DUNDEE.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At the meeting of this association on Thursday last (January 15) Mr. George Little contributed a paper on ointments. It was announced that Dr. John Stewart, F.S.Sc., surgeon-dentist, had presented a gold medal to the association for competition among the students. The hope was expressed that the local pharmaceutical students would thus be encouraged to greater efforts in the future. Dr. Stewart was unanimously elected an honorary member of the association.

THE ASSOCIATION CONVERSAZIONE.—The second annual *conversazione* of the Dundee Chemists' Assistants' and Apprentices' Association was held in Gray's Rooms on Tuesday night, Mr. J. William Russell presiding. Mr. Carteighe was present, and with him Mr. Storrar (Kirkcaldy), ex-Bailie Doig, Conncillor Ferrier, Dr. Buist, Mr. James Russell, Mr. Charles Kerr, Mr. J. Millar Hardie, and Mr. F. W. Young, F.C.S. After tea the chairman made a short speech, in which he advocated the claims of the association, and briefly recited the good results which had attended its work. This was preliminary to an excellent programme of songs and recitations. At an interval in the programme the chairman introduced Mr. Carteighe, who complimented the Dundee chemists' assistants on their excellent entertainment, and spoke of the advantages to be derived from social intercourse and the reading of scientific papers. Mr. W. Mair proposed a hearty vote of thanks to Mr. Carteighe for his encouraging remarks; and other votes of thanks were also accorded before the room was cleared for dancing. In the picture-gallery were several interesting exhibits, amongst them a vial of Koch's lymph with the appliances for its use, the latter being lent by Mr. J. W. Russell. A pleasing feature of the refreshment-buffet was a liberal supply of hot "bovril," which was found to be both "grateful and comforting." The programmes were perfumed with "Hasu-nollana." The *conversazione* was in every sense a brilliant success, and reflected credit on the committee who had charge of the arrangements.

EDINBURGH.

MR. H. BELLYSE BAILDON, pharmaceutical chemist, read a paper last week to the Edinburgh Architectural Association on "The Art Delight: its Rationale."

SETTLEMENT OF A GLASGOW ACTION.—An action was raised in the Court of Session by Mrs. Mary Lindin or Morrison, widow, 164 Stobcross Street, Glasgow, against John Mackay & Co., wholesale manufacturing chemists and aerated-water manufacturers, of Glasgow and Canning Street, Edinburgh, for 250*l.* damages for the death of her daughter, aged seven years, who, on August 29 last, while crossing Stobcross Street, was knocked down and killed by a horse and lorry belonging to the defenders. The action has been settled, the pursuer having accepted 50*l.* 10*s.* and expenses.

ROYAL SOCIETY OF EDINBURGH.—A meeting of the Royal Society of Edinburgh was held on Monday, Lord M'Laren in the chair. Professor W. H. Perkin made a communication on "Berberine," the yellow alkaloid of *Berberis vulgaris*, with which he said he had been experimenting during the last five years. The examination of the oxidation products of berberine gave a variety of new compounds, the study of which showed that this alkaloid was closely related to papaverine, hydrastine, and narcotine. As the result of his investigations, Professor Perkin had constructed a formula which he considered to accurately represent the constitution of berberine. Professor Crum Brown said that all chemists present must feel indebted to Professor Perkin for putting so clearly before them the results of what must have been a very long and laborious work. The constituents of this substance had certainly been followed up with great acuteness and skill by Professor Perkin. There were not many of the alkaloids which had been worked out with anything like the fulness which Professor Perkin had bestowed on the constitution of berberine.

General News.

A FALL OF MANNA recently occurred at Bagdad. The substance was eaten greedily by animals, made good bread, and has since been found to be a lichen of the *Lecanora esculenta* family.

MR. CARTEIGHE AT CARLISLE.—A general meeting of registered chemists of Carlisle and district will be held at the County Hotel, Carlisle, on Monday, January 26. Mr. William Martindale, of London (a Carlisle derivative), will also attend. The chair will be taken at 2.30 p.m. by Mr. A. Thompson, Carlisle.

LINIMENT-POISONING—A NARROW ESCAPE.—On January 15 a sad case of poisoning was reported in Ballymena. A man named James Kenny, of 33 Larne Street, an operative in the Braid Water Spinning Mill, took by mistake about 6 drachms of iodine liniment in place of a tonic which he had been in the habit of taking before meals. A messenger was immediately despatched for medical assistance, and, notwithstanding the fact that the man had taken so much of the fluid, Dr. Forsyth succeeded in counteracting the effect of the poison, and Kenny is now progressing favourably.

FIRES.—A fire occurred on January 15, on extensive premises belonging to Messrs. Holdsworth & Sons, chemical manufacturers, Heckmondwike, and damage was done to the amount of several thousand pounds. The fire is supposed to have been caused by sparks from an engine on the Lancashire and Yorkshire Railway.—A great fire occurred at Queensferry, near Hawarden, on January 16, at the works of Messrs. Joseph Turner & Co., chemical manufacturers and tar-distillers. About 5.35 a still, charged with 10 tons of anthracene oil, exploded, owing to the choking of the worm. A volume of flame shot skywards, illuminating the scene for a wide area and visible ten miles off. The burning oil scattered itself over the yard, and a vast stock of pitch was ignited. By the explosion the brickwork surrounding the still was completely blown out, and a large over-head water-tank, containing 8,000 gallons, was brought to the ground. Three men left in charge for the night were burnt by the explosion, two of them so seriously that they had to be enveloped in wool and driven to Chester infirmary. The Sandycroft Fire Brigade, by using ammonia-water from a 50,000-gallon tank, subdued the fire in an hour and a half.—A fire has occurred at the printing-offices of the *Oxford Chronicle*, High Street, Oxford, causing considerable damage to the type, machinery, and other plant and materials stored on the premises. Adjoining the *Chronicle* buildings are the extensive stores of Mr. G. C. Druce, pharmaceutical chemist, but fortunately the fire did not reach the rare botanical collection of which he is the possessor.—On Monday of last week a fire broke out at the Drug Stores, Broad Street, Oxford, owing to some straw becoming ignited. A few buckets of water, however, extinguished the flames.—A serious fire occurred on Sunday last at the chemical works

of Messrs. Golding, Davies & Co., Widnes. In the sulphur-shed of the works some sparks from the furnace fell among a number of bags of sulphur and ignited them. The flames spread to the roof, which also caught fire. The sulphur-shed is in the midst of the works, but, fortunately, there was no wind blowing, and the fire-brigade succeeded in subduing the flames after they had raged for four hours. The damage is estimated at considerably over 1,000*l.*—An alarming fire broke out on Tuesday afternoon last at York Street, Walworth, upon the extensive premises of Messrs. W. Bush, Son & Co., manufacturing chemists. The fire was caused by ether coming in contact with a gas-jet, and, as a result, the store and packing rooms immediately took fire and got well alight. The call was communicated to the firemen by means of the fire-alarm, and a hydrant and a manual were set to work. It was only with great difficulty that the adjoining offices and stores were saved from destruction. The first building was very severely damaged by fire, water, and breakage, and a part of the roof was destroyed. One of the workmen, named William Merritt, aged 29 years, was terribly burnt on the face and hands.

Foreign News.

THE GERMAN SOAP-MAKERS.—A general meeting of the newly-formed union of soap manufacturers of Western and Southern Germany was held at Frankfort-on-Maine recently. Similar unions exist in Central and Northern Germany, and all of them appear to be in a highly flourishing condition. The unions fix the prices of the products of the members' works, and it is said that they contemplate a general increase shortly.

THE SULTAN AND KOCH'S CURE.—The Sultan of Turkey has autocratic ways in dealing with the medical profession. He sent some doctors to Berlin to study Koch's remedy for tuberculosis, and they returned with a supply of the famous lymph, hoping perhaps to perform wonders with it themselves. Of this anticipation they are baulked. His Majesty has caused all the bottles of fluid to be delivered up to him for safe-keeping, until proper establishments have been prepared for the reception of patients. He might employ his autocratic power worse than by keeping the stuff altogether.

LYSOL IN THE GERMAN LAW COURTS.—The manufacturers of a German disinfectant called "Lysol" have just been prosecuted in the Hamburg courts for infringement of the German patent law. It appears that the lysol makers, headed an advertisement of the article in German journals "Imperial German Patent," whereas not lysol itself was protected, but a patent had been granted for a process to form an aqueous solution of tar oils only. In fact, under the provisions of the German patent law an application to enter the word "lysol" upon the register as the product of the process patented had been refused. The defendants pleaded in vain that lysol was simply the material manufactured under a duly patented process; judgment went against them, and a fine of 20*m.*, or 4 days' imprisonment, was imposed.

ANOTHER CONSUMPTION-CURE.—Two doctors of Nantes on Saturday read before the Paris Academy of Medicine the results of their experiments for the cure of consumption. Acting on the well-known fact that the goat is not liable to the disease, they have transfused the blood of the animal into several hospital patients. The week before a boy of seventeen and a woman of forty-seven, suffering from consumption, each received an injection of one ounce of goat's blood. The condition of both patients had improved greatly. The boy's temperature, which had been for several days about 104°, fell to 98·6°, and had not risen since. Expectoration had diminished, and the phlegm had lost its purulent aspect, while the appetite had returned. Several other patients had received injections, and their condition has improved considerably.

STRANGE DISAPPEARANCE OF A QUEENSLAND CHEMIST.—On August 27 last, William Lale, who carried on business as a chemist in Ipswich, Queensland, left Brisbane by rail for Sydney en route for England by the Orient steamer *Oroya*, in which he had booked his passage. He arrived in the New

South Wales capital, but there, instead of embarking on the Orient boat, he went to work as a wharf labourer on board the steamship *Coromandel*, then lying in the port. Mr. Lale's brother-in-law suggests that the latter took this step out of his known strong antagonism to the labour-union tactics, as he was not in want of funds at the time. It is not stated how long Lale worked on this vessel; but soon after his arrival at Sydney an officer of the *Coromandel* found in the ladies' bathroom a gold watch and chain, a draft for 290*l.*, a bank passbook, a portmanteau, and an overcoat, all which articles were identified as the property of Lale. Meanwhile the owner had disappeared, and although the police authorities in the various colonies have received intimation of the affair, he has not been heard of since.

AN OLD MURDER CONFESSED.—A little more than ten years ago a chemist carrying on business in the Place Beauveau, Paris, was, together with his servant-maid, assassinated in the night. The object of the crime was robbery. Suspicion fell upon the chemist's assistant, a young man named Walder, who simultaneously disappeared. No trace of him has been discovered until quite recently. According to the French law of prescription, a murderer who can elude detection for ten years may declare himself with impunity. This Walder has just done. He is now comfortably settled in business as a chemist at Caracas, the capital of Venezuela, under the name of Welser. The person to whom he is reported to have thus unburdened himself was a member of the Venezuelan police force. He says he committed the murder in a moment of madness, omitting the circumstance that he carried off 40,000 francs. His first instinct on realising what he had done was to give himself up to the police, but the instinct of self-preservation prevailed. After hiding in the neighbourhood of the St. Lazare railway station for two months, he succeeded in reaching Nantes, and proceeded thence to the port of Paimbœuf, where he embarked for South America. On arriving there, he set up in business as a chemist at Caracas. His life in Venezuela has been a somewhat chequered one. In one of the revolutions of the country he served as chief surgeon with the Nicaraguan forces. Now he thinks he has sufficiently expiated his crime by ten years of exemplary conduct, and so long as he remains in Caracas he is safe. Considering the nature of his confessions, it is, perhaps, doubtful whether public opinion in Caracas will permit him to further pursue his present occupation there as a dispenser of drugs.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

MEDICAL TEACHING IN HOSPITALS.—As a sanction to its recent vote tending to the establishment of a municipal faculty, the City Fathers have granted 17,700*fr.* to the hospitals and asylums medical libraries; 1,500*fr.* to Drs. Lancereaux, Jeoffroy, and H. Huchard, and 1,200*fr.* to Dr. Hallopeau, for their medical laboratories.

PROFESSOR OF CHEMISTRY AIMÉ GIRARD, of the Arts et Métiers (not his namesake of the Municipal Laboratory), has been awarded the grand gold medal by the Northern France Industrial Society for his labours applied to agricultural chemistry. His recent memoirs on the adaptation of potatoes to distilling were noticed at the time in THE CHEMIST AND DRUGGIST.

AMENDMENT TO THE PHARMACY BILL.—Near the end of December Deputy Froin presented an amendment to the Pharmacy Bill, still in committee, which requires pharmacists to prepare personally all their medicaments, or to have them prepared under their own supervision. The requirement would apply especially to such preparations as are dispensed on prescriptions. The amendment seems hardly likely to be adopted.

MYSTERIOUS EXPLOSION.—Last Tuesday an explosion occurred in M. Finance's pharmacy, 5 Boulevard Rochechouart. The front window was blown into the street, and many jars and bottles were broken. The clock stopped at 1.15, showing the precise time of the accident. Fortunately no one was injured, neither outside by the flying débris, nor

inside, where pharmacist Finance and his assistant were busy behind a counter. The firemen were promptly on the spot, and made investigations and soundings, but could find no apparent cause for the explosion.

A NEW COCAINE TEST.—Pharmacist Schell, of Mulhouse, has called attention to a new reaction which he has observed. When a minute quantity of cocaine hydrochlorate is rubbed with an equally small proportion of calomel, by means of a dry glass rod, on a dry porcelain surface, the mixture will immediately turn black when the operator merely breathes upon it. The same change of colour may be obtained by using a glass rod dipped in water, most of the liquid being briskly shaken off. It is necessary that the amount of moisture be small, as a whole drop of water is sufficient to prevent the reaction. Taken in all, the breathing process is preferable. No other alkaloid will give the same reaction under similar conditions; pure atropine alone will blacken calomel when boiled with it in water. It should be remarked that atropine salts will not affect calomel, while the reverse happens with cocaine, the reaction being afforded by the salts alone and not by the pure alkaloid. Professor Flückiger, some time since, mentioned several points of resemblance between atropine and cocaine.

ARTISTS WANT BETTER PAINTS.—French painters are dissatisfied, and with good reason, with the pigments now supplied. Any one may notice that the old masters of the fifteenth and sixteenth century are still in a good state of preservation, while modern paintings are apt to fade and become dull after a few years. The reason, it seems, is that, while in old times painters only used simple mineral colours which they had ground in their studios by their pupils, in our days the paints procured are of unknown composition and supplied ready ground by dealers, who aim rather to supply brilliant than fast colours. The Society of French Artists has taken the matter in hand, and proposes to establish a laboratory, where, by competent chemists, the colours supplied by dealers would be analysed, and, if found satisfactory, would be allowed to be sold under the guarantee of the Society. Besides, the paints would be designated, not by fancy appellations, as at present, but by their chemical names. It is also proposed to investigate and, if possible, correct the evils due to the darkening of the oil. Before oil colours were invented pictures were more durable; for instance, there are at the Louvre Museum specimens of ancient Greek art showing a delicacy of shades and colours which ought to shame modern chemists.

FINED ALL AROUND.—In March, 1889, Godefroy, a pharmacist, established on the Rue Gay-Lussac, bought another establishment in the Rue Drouot, which he transferred to the Passage de l'Opéra. Mézard, a pharmacist-assistant, took charge of the place, occupying with his family the private apartments pertaining thereto, dispensing prescriptions, retailing medicines, and being generally considered the proprietor of the establishment. In the mean time Godefroy remained at his old pharmacy, seldom went to the new one, and scarcely ever acted there as a pharmacist. In April, 1889, Godefroy sold the place to Dr. Bontelaud, who was also a pharmacist. The transfer made no change in the management at the Passage de l'Opéra, Mézard continuing to act as the principal, while Bontelaud, having all his time taken up with his patients, seldom showed himself in the pharmacy. The Seine Tribunal, before which the trio recently appeared, held that each had violated the law—Godefroy by keeping two pharmacies at the same time, Mézard by managing a pharmacy without being qualified, and Bontelaud by lending his name to cover Mézard's irregular situation. The defendants were each sentenced to 500*f.* fine, and 100*f.* damages to the Seine Pharmacists' Protection Society.

A RIVAL TO THE PARIS FACULTY.—The long-mooted project of establishing a municipal school of medicine connected with the hospitals is started again, and seems to be taking shape. When first entertained, the hospitals' medical corps opposed it as a body, owing, it is said, to the presence of one or two obnoxious persons among the promoters of the movement. But the obstacle having been removed, and the physicians and surgeons being favourable, a decided step has been taken. The Municipal Council, on motion of Councillor Strauss, has passed a resolution inviting the Assistance

Publique management to frame a project for organising practical teaching in hospitals, and to present it to the board of trustees, and the physicians, surgeons, and accoucheurs of the hospitals. If the official faculty finds itself confronted with a dangerous rival, the malcontents say, it will have no one to blame but itself. For several years medical teaching in the faculty has been divided into two distinct parts—namely, the professors' lectures, forming the official education, and the fellows' (*agrégés*) complementary courses. The latter were by superior authority destined to complete the professors' teaching, but the complaint is that the faculty has done nothing to encourage their work. It is true the management has done nothing to hinder those younger teachers: they simply took no notice of them. For instance, say the dissatisfied ones, there is an *agrégé* in charge of a course of lectures who has been given no laboratory, no instruments, and none of the animals necessary for his demonstrations. No porter is provided for any of these lectures, the lecturer being obliged to ask some of his willing listeners to pin to the blackboard the illustrating diagrams which he had drawn at his own expense. As the Municipal Council has control of the hospitals, which the faculty uses to a ridiculously limited extent, the new school would offer considerable advantages to the students in the way of practical education, and suffer from no lack of able professors.

Personalities.

MR. BISHOP, of Tontine Street, Folkestone, has had new premises erected for him, and these have been fitted with laboratory, &c., by Messrs. Thompson, Walters, Hole & Co.

MR. HENRY T. GRIFFITHS, from Messrs. Allen & Hanburys, has succeeded Mr. B. John in the well-known pharmacy at 10 Victoria Street, Clifton.

MR. J. C. POTTAGE, of Edinburgh, President of the Homœopathic Pharmaceutical Association, has reproduced in pamphlet form the address which he delivered at the annual meeting of the association on "Kola: its History and Characteristics."

WE are asked to state that Mr. Russell Morrison's death, which we reported last week, took place on January 12, that his age was 44, and that the firm of Lambert & Morrison, to which the deceased belonged at one period of his career, was merged into the present house of R. Morrison & Co.

MR. J. W. D. HUME, who for many years past has been dispenser to Messrs. Worthington & Shann, surgeons, of Lowestoft, has lately commenced business as a chemist and druggist in that town. A handsome establishment has been fitted for him by Messrs. S. Maw, Son & Thompson, being principally in solid Spanish polished mahogany. The window-case is of cathedral glass, and in the several divisions are pictorial representations of pharmaceutical plants.

MR. KEAR COLWELL, the public analyst for Clerkenwell, has the good fortune to possess a good voice, and this he very kindly places at the disposal of the parish whenever anybody is to be benefited. Three times in one week he sang at parochial festivities organised by the vicar and churchwardens of Clerkenwell; and on Monday last he sang three songs at the Wellington Hall, Islington, in aid of the Clerkenwell fund for providing free meals for poor Board School children.

MR. CLEMENT SCOTT, the dramatic critic, is in the Sunny South just now, and is forgetting all about the Sydney Grundys in his chats with Mr. W. A. Powell, the English pharmacist of Hyères. Says Mr. Scott in his last letter:—"For the last few days before the advent of this glorious Sunday morning Hyères has been down in the dumps. I reckoned without my host. I honestly own that I said what was not strictly true. On the strength of evidence derived from the oldest inhabitant, and after consulting my friend, the well-informed and literary English chemist, who is the great authority here and knows his Hyères by heart, I ventured to remark that it never snowed at Hyères and that it never rained at night. I should have qualified that remark and said 'seldom.' Both I and the excellent Mr. Powell are now evidence to the fact that it has snowed at Hyères."

Pharmaceutical Society of Ireland.

A SPECIAL meeting of the Council was held on Thursday, January 15, at Dublin at 2 p.m. The President (Mr. Charles Evans) was in the chair, and there were also present the Vice-President (Mr. Wells), and Messrs. Hayes, Robinson, Beggs, Grindley, Hodgson, Simpson, Drs. Burnes and Baxter. The following

NEW MEMBERS

were elected:—Dr. W. R. Oliver Barker, 6 Gardiner's Row, Dublin; and Mr. James Wells, 52 Upper Sackville Street, Dublin.

CHEMISTS AND DRUGGISTS.

A report of the Pharmacy Act Amendment Committee stated that certificates from the following gentlemen, who had been in business as chemists and druggists prior to 1875, were accepted for registration:—Messrs. Alexander Mullen, Castlederg; David Galbraith, Londonderry; Thomas McDonnell, The White House, Portaferry; James Hellock, Armagh; Alexander Sinclair, Ballyhackmore; William J. Reynolds, 8 Hardwicke Street, Dublin; and Arthur Burns, Mobill.

The following gentlemen were elected

ASSOCIATE DRUGGISTS:—

Dannister, William, Victoria Lodge, Cork
 Boyd, Samuel P., M.A., 18 Leeson Park, Dublin
 Clotworthy, Samuel, 15 Bridge Street, Belfast
 Flanagan, Mrs. Marian J., Granard
 Gibson, Samuel, Montpelier, Belfast
 Gibson, W. J., Montpelier, Belfast
 Haslett, Sir James H., 18 North Street, Belfast
 Healy, Luke J., 82 West Street, Drogheda
 Hogg, James, York Street, Belfast
 Johnston, Charles, 17 Upper Sackville Street, Dublin
 McDowell, Samuel, 209 Shankhill Road, Belfast
 McMillan, Thomas, Victoria Street, Belfast
 Moore, William F., The Linen Hall, Dublin
 Rankin, W. J., 171 New Lodge Road, Belfast
 Shaw, J. H., 60 Beechfield Street, Belfast
 Shaw, William, 186 Grosvenor Road, Belfast
 Turkington, Samuel, Cookstown

The following were proposed for election at the next meeting as associate druggists:—Messrs. Samuel Boyd, 46 Mary Street, Dublin; Daniel Brogan, Castlepollard; P. J. Finan, 30 Market Street, Sligo; Frederick H. Harpur, Ballinasloe; Robert Watson, Rathfriland; William Doig, 39 Mill Street, Belfast; Robert Campbell, 40 Hartington Street, Belfast; John Watson, Knock, co. Down; James Gregg, Ballyclare; John McLoughlin, Carrigallen; Thomas W. Reynolds, Scotch Street, Dungannon; J. McConkey, Leadbetter Street, Belfast; Joseph Canavan, High Street, Portadown; Thomas Boland, Ballenagh; and Liddle Thompson, Lisnaskea.

The names of the following licentiates, from whom no replies to registered letters had been received, were reported:—Mr. Alexander Chapman, 50 Ann Street, Belfast; Mr. Frederick William Devlin, 17 Donegal Street, Belfast.

THE EXAMINATIONS.—DR. DUFFEY'S REPORT.

A letter was received from Sir William Kaye, Clerk of the Privy Council, enclosing the following report to the Lord Lieutenant from Dr. George Duffey, as visitor of the examinations of the Society:—

30 Fitzwilliam Place, Dublin,

December 22, 1890.

May it please your Excellency,—I have the honour to submit for the information of your Excellency in Council the following report on the examinations held by the Pharmaceutical Society of Ireland during the year 1890:—For the Preliminary examinations 46 candidates presented themselves. This is a smaller number than that for the two previous years, as is shown in the table I furnished in my report for last year. On the other hand, the number of candidates for the Licence—viz., 45—and the percentage of those who passed, was higher than that for any of the previous four years during which I have been the visitor. Twenty-six candidates (56.5 per cent.) passed, and 20 (43.4 per cent.) failed at the Preliminary examinations; 33 (73.3 per cent.) obtained the licence, and 12 (26.6 per

cent.) were rejected. I regret I am unable to report that any improvement was shown by the candidates at the Preliminary examination in general education, or in the subjects preliminary to special pharmaceutical education. The answering, as a rule, was indifferent, although the examination-papers were by no means difficult, and the marking was extremely easy. The average percentage of the answering of the successful candidates was 54 per cent. The highest percentage obtained was 72, and the lowest on which a candidate passed was 42 per cent. In my report to your Excellency for the year 1888, and again last year, I drew attention to the superficial knowledge of Latin, English, and arithmetic shown by the average candidate, and to the fact that candidates were allowed the examination, notwithstanding positive failure in one or more of the special subjects—viz., metric weights and measures, elementary chemistry and physics, and botany—a knowledge of which is of much importance to pharmaceutical students. By an Order of Council of the 18th of April, 1888, "a percentage of 50 per cent. of the entire marks must be obtained in English and arithmetic, and 40 per cent. on the entire course, to entitle a candidate to pass." The President and Council of the Society, in their observations addressed to your Excellency with regard to my report on their examinations, for the year 1888, a copy of which was transmitted to me from the Council Office on the 15th March, 1889, assert that "the possibility of passing candidates on insufficient answering in botany, chemistry, and physics is removed by the adoption of minimum marks in all subjects," and quote, as the authority for this statement, the Order of Council I have referred to. This appears to be an error on the part of the Society, as the order fixes a minimum percentage for two subjects only—English and arithmetic—and for the aggregate total marks. As a matter of fact, however, during the present year three candidates were passed who failed to obtain a single mark out of the ten marks allotted in "Weights and Measures." One of these three successful candidates got only two marks out of ten in "Elementary Chemistry and Physics," while the other two scored but one in that subject. Further, one of these two obtained but one mark also in botany. Another passed without a mark in chemistry, and with but two marks in botany. Of the subjects for which a minimum percentage is defined, 12 candidates failed in English and 11 in arithmetic. The subject in which there was the worst answering was "Weights and Measures." Fourteen of the entire number of candidates did not obtain an answer in this part of the examination. As regards Latin, candidates were allowed to pass whose marks, if marks mean anything, showed they had no satisfactory knowledge of that language. It would appear that the remarks and suggestions I had the honour to make in my last report of the Preliminary examinations of the Society have not as yet received the attention of its President and Council. This being so, I regret having to repeat the observations I felt called upon to make a regards what I believe to be the defects in these examinations. Now that by the Pharmacy Act (Ireland) Amendment Act of this year the Society is so greatly enlarged, it would seem even more than formerly, to be its advantage to require that the general and elementary scientific education of those who may proceed to obtain its highest grade should be solid and accurate, and that the examination should be made searching and judicious. I am still strongly of opinion that such an important examination as the Preliminary examination of the Pharmaceutical Society should not be conducted by a single examiner. I referred to this matter in my first report (January 18, 1886). The Council then objected to a second examiner, mainly on the ground of the additional expense such an appointment would throw upon the Society. But from my long experience of examinations, and knowledge of the views held by those best entitled to form an opinion, I am convinced that in justice to the examiner, as well as to the examinee, no single individual should have the sole responsibility of passing or rejecting a candidate. If there is not a second examiner, there should, I think, be a competent assessor present during the entire examination, with power to vote for or against a candidate after perusal of his papers. The results of the examinations for the Licence were, as I have already stated, very satisfactory; the percentage of the successful candidates—73.3 per cent.—being the highest yet reached. In four cases the examiners, after conference, exercised their discretion in passing candidates. In one of these cases the candidate failed by three marks in obtaining the necessary 55 per cent. in the aggregate marks. In two cases the candidate did not come up to the minimum in Pharmacy; and in the fourth case the candidate—who had been rejected twice previously—answered badly in Botany, poorly in Theoretical Chemistry, and did not attain the standard laid down of the aggregate marks. Including the failures in the above cases, there were eight failures in Botany, six in Theoretical and four in Practical Chemistry, six in Pharmacy, and one in Materia Medica. Two candidates failed in four subjects; four in two; and nine in one subject. As I previously reported, these examinations are conducted with efficiency and care, and are of a high standard. At both the examinations—Preliminary and for the Licence—there is still a want of supervision. This is not the fault of the examiners, who are occupied more or less with individual candidates. A regulation providing for the attendance of a member of the Council of the Society at the examinations was approved by an Order in Council of March 21, 1888, but it does not appear to be regularly observed, as on some of the days upon which I visited the examinations, no member of the Council was present.

GEORGE N. DUFFEY, M.D.

Mr. HODGSON: Severe.

The VICE-PRESIDENT: The visitor from the Council may be here, and Dr. Duffey may not be here at the same time.

Mr. HODGSON: I don't think it is contemplated that our visitor is to be present during the whole time of the examination.

The VICE-PRESIDENT: The by-law is that our visitor must be present at the examination; but it does not say for the whole time.

Mr. HODGSON: That is different from being present during the whole time. How long was Dr. Duffey here?

The VICE-PRESIDENT: Does he come every day that the examination is held?

Mr. FERRALL (Registrar): He does not.

The VICE-PRESIDENT: I was here for an hour and a half the other day, and I did not see him.

Dr. BURNES said he thought Latin ought to be eliminated altogether from the Preliminary examination. The candidate could not take it and at the same time score well on the other subjects. It was only a farce to have it in the Preliminary examination.

Mr. HAYES: I don't think so. If a boy does not commence Latin at school, he will not make a proper hand of it afterwards.

Dr. BURNES: He should be up in Latin before he becomes a candidate for our Preliminary examination at all. It has been proposed to eliminate it from the medical curricula. The attention of our candidates at the "Preliminary" should be concentrated on weights and measures, chemistry, botany, and the trade part of our qualification—if I may so say—and not upon the arts part.

The VICE-PRESIDENT: I differ with Dr. Burnes there.

Mr. BAXTER said it was most important that the "Preliminary" candidate should be acquainted with Latin, because he would afterwards be too much occupied with pharmaceutical subjects to have time to master it. It should be remembered that prescriptions and the names of drugs were in that language.

Mr. GRINDLEY thought that botany and chemistry might with advantage be eliminated from the Preliminary examination, and reserved for the Licence examination. The standard of answering in the other "Preliminary" subjects might at the same time be raised.

On the motion of Mr. BAXTER, seconded by Mr. BEGGS, the report of Dr. Duffey was referred to the School Committee.

TERMS OF OFFICE.

Mr. GRINDLEY said the next business on the paper was the following notice of motion by Professor Tichborne:—"That from this date the outgoing President and Vice-president of this Society shall not be eligible for re-election after having held either of the said offices for three years." Professor Tichborne was not present to move that resolution; but he (Mr. Grindley) submitted that it was one that ought not to be entertained, because it would, if passed, create a disability not contemplated by the Act of Parliament at all.

The PRESIDENT: There was some rule passed on the subject.

Mr. GRINDLEY: There was; but it was never sent forward to the Privy Council for approval. Under the Act of Parliament the President and Vice-President are to be elected every year, irrespective of how often they may have served.

The PRESIDENT: Better defer the resolution until Professor Tichborne is here.

Mr. GRINDLEY: I don't think it ought to appear on the agenda paper at all.

Mr. HODGSON: It lapses now, and cannot be brought forward without fresh notice. If we see that it would be for the benefit of the Society to re-elect a gentleman to either those offices, the re-election should be valid.

ASSISTANTS IN BUSINESS BEFORE 1875.

Mr. HAYES moved, pursuant to notice:—"That assistants who were at business before the passing of the Act of 1875 be accepted for examination on the same terms as those who subsequently went into business." This arrangement had been contemplated, but, owing to the opposition of the druggists themselves, was not introduced in the last Act.

Mr. GRINDLEY: Have we power to amend the Act of Parliament?

Mr. HAYES: No; but we can do an act of justice, and if the Privy Council think that it is not contrary to the spirit of the Amendment Act they can make it legal.

Mr. HODGSON: I beg to second the motion. I think that what it proposes is only fair.

The VICE-PRESIDENT: What is the difference between the two examinations?

Mr. HAYES: There is not a great deal of difference; but they can go in for the modified examination with greater ease to themselves. Some of them are not young, and they would not like to go in for an examination in which they might be plucked.

Mr. BEGGS: What title would they get?

The VICE-PRESIDENT: Registered druggists.

The resolution was unanimously agreed to.

ELECTION OF REGISTERED DRUGGISTS TO THE COUNCIL.

A meeting of the Pharmaceutical Society was then held pursuant to the provisions of section 13 of the Pharmacy Act (Ireland) Amendment Act, 1890, for the purpose of electing seven registered druggists, or chemists and druggists, to be additional members of the Council of the Society.

There were eleven candidates, and, in pursuance of the rule relating to the election of druggists, voting-papers had been sent out previous to the Saturday week preceding the present date.

The PRESIDENT mentioned that one of the candidates, Mr. Samuel Clotworthy, was disqualified because in his nomination-paper there was no seconder; and another—Sir James H. Haslett—was disqualified because he had not written a letter to the Registrar within the time limited, stating that he consented to act on the Council if elected. Two of the voting-papers also had been returned without signatures.

Messrs. Baxter, Grindley, and Dr. Burnes were appointed scrutineers of the voting-papers.

They reported that the following gentlemen had been elected:—Mr. S. P. Boyd, M.A., 28 votes; Mr. William J. McNeight, 25; Mr. Samuel Gibson, 17; Mr. Charles Johnston, 15; Mr. W. N. Moore, 14; Mr. William J. Rankin, 14; and Mr. John H. Shaw, 8. Their report referred to the disqualification of the two gentlemen, on the grounds mentioned by the President; and it further stated that there were three spoiled voting-papers, and that Mr. Thomas McMullan, one of the candidates, had withdrawn.

Mr. BAXTER drew attention to the fact that Sir James Haslett had sent in a voting-paper in his own favour and signed by himself. That he (Mr. Baxter) contended was distinct intimation that he was willing to serve if elected.

Mr. HODGSON: Perhaps he meant the voting-paper to be an answer to the letter of our Registrar. If so I think we ought not to be too strict.

Mr. GRINDLEY: The regulation is very distinct. It doesn't say that a voting-paper is to be evidence, but that the gentleman must signify in writing that he is willing to serve.

The VICE-PRESIDENT said the words of the regulation were that the name of the candidate was to be "sent to the Registrar fourteen clear days before the annual meeting with an intimation in writing from the candidate that he would serve if elected."

Mr. BAXTER said that seemed to be decisive of the matter.

Mr. GRINDLEY: It is a great pity that some of these gentlemen have not attended here to look after their own interests.

The seven gentlemen mentioned in the report were declared elected, and the meeting adjourned.

SALINAPHTHOL is the name which has been given to a compound of salicylic acid and naphthol, similar in character to the compound salol, formed by the combination of salicylic and carbolic acids. It was supposed that the new compound would be better than salol in the same affections, but clinical results have not yet been favourable. The dose of the substance is 5 to 10 grains.

THE PHARMACY ACTS AMENDMENT BILL.

MR. CARTEIGHE IN SCOTLAND.

THE President of the Pharmaceutical Society has been busily engaged during the current week at meetings called in the chief cities of Scotland to hear him, and to discuss the affairs of pharmacy generally, and the Pharmacy Acts Amendment Bill particularly. We bring our record up to Thursday night. Subsequent meetings are arranged for Edinburgh on Friday, and, crossing the border, at Carlisle on Monday. This particular campaign was opened at

ABERDEEN

on Monday afternoon. The meeting was well attended by members of the trade from the north of Scotland generally. Mr. Johnston (Messrs. George Reid & Sons), president of the Aberdeen and North of Scotland Chemists' and Druggists' Society, was in the chair.

Mr. STRACHAN, the secretary of the association, intimated a number of apologies for inability to attend the meeting, the list including Mr. Hodgkins (Breechin), Mr. McMillan (Inch), Mr. Lunan (Banchory), and Mr. Robertson (Elgin).

The CHAIRMAN then, in the name of the meeting, welcomed Mr. Carteighe to Aberdeen. Mr. Carteighe was with them for the purpose of discussing the pros and cons of the draft Pharmacy Act Amendment Bill, and he hoped to have a free and full discussion. It was only in that way that the wants and opinions of the trade throughout the country could be ascertained, and the Bill altered or amended as might be deemed necessary. The Aberdeen Society had had the Bill under discussion, and on some of the clauses there were differences of opinion which might be heard of in the course of the proceedings.

Mr. CARTEIGHE, who was warmly received, remarked that he counted it a great honour to sit at the feet of the President of a society of chemists and druggists which was older than the Pharmaceutical Society of Great Britain. He congratulated Aberdeen on the fact that in point of seniority their society ranked before the Pharmaceutical Society. The educational facilities which were, and had been, in existence for so many years in Scotch cities, and which were notably easy of attainment in Aberdeen, had no doubt largely contributed to the satisfactory result to which he had referred. The Aberdeen society was founded about nine years before the Pharmaceutical Society. At that time Aberdeen was probably regarded as being at one corner of the world, and practically cut off from the world: and he supposed that a Londoner very seldom found himself in Aberdeen at that time without very good cause. Since then, however, things had changed, and what happened in Aberdeen to-day happens in London and in Dover to-morrow, and they were all practically one set of brethren. If his presence that day would help in any way, apart from any question of the Pharmacy Bill, to show that they in the parent Society had the welfare of the whole trade at heart, his object in coming to Aberdeen would be adequately served. He was sorry that he should be obliged to inflict himself on the audience for some time. He had been obliged on account of his official position, and in consequence of the very handsome salary he got as President of the Pharmaceutical Society—(laughter)—to go into the details of this Bill in order to be able to explain them to his brethren in different parts of the United Kingdom. Having pointed out that the Council of the Pharmaceutical Society was not a law-making body, but a body to which had been entrusted certain statutory powers of examination and registration, Mr. Carteighe proceeded at some length to trace the scope and effect of past legislation affecting chemists and druggists, and, coming to deal with the new Pharmacy Bill, he pointed out that it divided itself into two parts. One part dealt with education, examination, and the constitution of the Pharmaceutical Society, and the other part had reference to the efforts which were proposed to be made to obtain greater powers for every member of the trade. Mr. Carteighe, whose remarks on the first aspect of the Bill were frequently applauded, affirmed that the tendency of the times all round was for more education on the part of the individual and smaller pay. As to the con-

stitution of the Pharmaceutical Society, he described it as the most democratic society in the country. It was open to any member of the trade to join that Society, and to have a vote. It was open to the members to turn out two-thirds of the Council every year, including the President; and what more power could be expected under any constitution? If the Council did not represent the trade, it was not their fault. If the trade would not come to them, how could the Council represent them? They invited the trade to join them; and if they would not do it, surely it was hard to say that the Council did not represent the trade. If they did not do that which was right, let the members of the Society turn the Council out. (Applause.) That was a fair proposition. To remain outside and grumble, and do nothing, was a condition of things which was never good for anybody. Speaking specially with reference to clause 7, Mr. Carteighe said he did not care to say much about what he thought this clause would cover, but the Pharmaceutical Society had before them numerous cases in which men, to all intents and purposes, were carrying on the business of chemists and druggists, and really telling the customers that they could dispense prescriptions if that dangerous word "poison"—which never did any good—was left out. (Laughter.) And the public were disposed to accept that. Their original intention was that, as in the Irish Bill, the dispensing of prescriptions should be reserved for qualified men. They tried that in 1866, and, had it not been for opposition, would have obtained it. The gentlemen present would observe that in this Bill they had proceeded tentatively. They had to deal with an unsympathetic Government and an unsympathetic Parliament, that looked on any interference with any existing trade or profession with the greatest jealousy, and which was constantly holding out the doctrine that no justification existed for free trade unless it could be shown that great gain to the public would result. It was very easy, of course, to raise the cry that they were going to make it more expensive for the public to get its medicines. So they were, and that was what they intended; but their point was that it was good for the public that there should be restrictions—good for their safety and for their lives. In conclusion, Mr. Carteighe said he had not come there, like a candidate for their suffrages, to butter them. He would consider himself unfaithful to his duty if he did not frankly tell them the difficulties of their position as presented to those to whom they had to go, and guilty of trickery if he were to hide from them the views he had now propounded. (Applause.)

The CHAIRMAN invited discussion.

Mr. WILLIAM GILES, 123 Crown Street, Aberdeen, moved:—

That this meeting of the chemists of the northeast counties of Scotland is of opinion that the Council of the Pharmaceutical Society deserves the support of the trade in promoting further legislation in the interest of pharmacy.

It was, he said, over twenty-one years since any measure had passed the Legislature having a direct bearing on pharmacy, and considering the high pressure under which we now lived, and the rapidity with which new developments take place, conditions had arisen which could not have been anticipated, and in order to bring matters pharmaceutical into touch with the progressive nature of the age further legislation was of the greatest urgency. The Pharmaceutical Society had made several ineffective attempts, but with these they were not now concerned; they looked in hope to the future. He had never been connected with the Pharmaceutical Society, and possibly his reasons for not having become an associate of the Pharmaceutical Society were more illusionary than real; but they were these: First, he never could see that his doing so would result in any benefit to himself personally: or, second, that it would in the slightest degree promote the general good. But he gave his hearty support, as he hoped every member of the craft would, to the President and Council in their present efforts to obtain necessary legislation. Many things had happened since the Bill was adopted in October last. Amongst these was the fact that the President had perambulated England and Wales, and now, having begun a campaign in Scotland, he would return to London a tower of strength in himself, and, fortified by the powerful support of the chemists and

druggists of the country, would, he trusted, be able to obtain the passage into law of such a measure as would satisfy the just aspirations of the trade, and at the same time serve the interests of the public. There were twelve sections in the Bill, but sections 2 and 7 seemed to contain the leading provisions. At to section 7 he suggested an alteration in the phraseology so as to make it plural in its application. By section 2 power was sought to require candidates for the final part of the examination to lodge certificates of having attended a course of lectures in certain subjects. As to section 3 he would like some information regarding by-laws which would be brought into force. Mr. Carteighe had told them that the instruction necessary would be somewhat on the lines of a medical qualification. A medical qualification could be obtained in four years, and in most places a doctor dispensing medicines had an enormous advantage over a chemist.

Mr. CARTEIGHE pointed out that next year the new regulation came into force by which it would take five years to obtain a medical degree.

Mr. GILES said the difference between the two qualifications as to time and expenditure of money would be so little that lads having a notion for the drug business would be induced to become doctors rather than chemists. He did not think it would be just to the rising generation of chemists to force upon them a fixed course of study, unless they could secure for them the sole right to distribute drugs; and even then he was doubtful of the propriety of it. The number of doctors dispensing medicines would certainly increase, but the chemists would become fewer. If the Bill, when it emerged from Parliament a fully-fledged Act, were found to have failed to secure considerable advantages over the present state of matters, he thought they might expect some assurance from Mr. Carteighe that when he applied to the Privy Council for authority to enforce the by-law to regulate this provision of section 2, he would not ask for its sanction for this part of the country. He thought that a person on attaining the age of 18 should be admitted to an examination in prescription-reading, practical dispensing, pharmacy, and perhaps *materia medica*, and on passing a satisfactory examination should be registered as a "chemist and druggist," or, if preferable, as an assistant pharmaceutical chemist entitled to act as a qualified assistant to a qualified employer, but not to carry on business. Such a person, in order to qualify to carry on business on his own account, should at 21 years of age be admitted to an examination of a much higher standard, and which might be divided into parts, and upon his passing the final part should be registered as a pharmaceutical chemist. By this arrangement only pharmaceutical chemists would be in business on their own account. In the course of further suggestions Mr. Giles urged a change in the system of electing the Council; he also desired to see some practical inducement for chemists to become members of the Society. He would urge Mr. Carteighe to take powers to amend the constitution of the Society, adopting some means whereby the entire body of chemists in the country would have a special interest in being members of the Society. If the object were attained it would give the Society that voice of authority which it ought to have. District representation would, he thought, be a step in the right direction. Everyone could not go to Bloomsbury Square.

Mr. CARTEIGHE: We don't want them. (Laughter.)

Mr. GILES said that from outlying districts few could go. He looked upon it as a duty to establish or subsidise schools of pharmacy at all the leading centres in the country, or in some way to provide the means of instruction necessary to pass the qualifying examination, which could not be learned at the dispensing-counter. He did not believe that any alteration of the constitution would improve the *personnel* of the Council. He believed the present members were an admirable body of men eminently qualified for the positions they hold.

Mr. CLARKE (J. & J. Urquhart, Aberdeen) seconded, and expressed his approval of the draft Pharmacy Bill. The measure secured the dispensing of medical prescriptions. That might not mean much in Aberdeen, but it meant a great deal in some towns where the chemist was hampered by quacks, botanic halls, &c. On every hand they heard the cry, "What does the Society do for the trade?" Let him ask another question, "What has the trade done, or what

was it doing, for the Society?" A small proportion of registered chemists supported it, but the great majority stood aloof, and said, "Do something for us, and we will join you." To them he said, "Come over unto Macedonia to help us." (Laughter and applause.)

Mr. RITCHIE (Aberdeen) observed that the curriculum and short lectures were at their hand ready-made in Aberdeen, but when they considered such remote places as Wick, Thurso, Portree, Inverary, Newton Stewart, and Stranraer, it was puzzling to find where such a curriculum could be carried out at anything like reasonable expense. For that reason he was of opinion that Preliminary examinations should be passed before any apprenticeship commenced. (Applause.) He suggested that, with the exception of the Preliminary, the rest of the examinations might all be taken at one time. He urged that if a man was "plucked" in his examination, the subjects on which he had passed should not be made a test at the next examination.

Mr. REID (Aberdeen) considered that the benefits of a curriculum would certainly be great in certain respects, but from a business point of view if the result would be the raising of the prices of medicines and articles with which they dealt, they were making a rope to hang themselves. He asked if the object was to bring the trade into fewer hands; if so, that also was a wrong policy.

Mr. JAMES PATERSON (Aberdeen) said that one of the difficulties regarding the Bill was that after they got the Bill they would do nothing. For instance, under the Act of 1852, power was taken by the Council to have examinations in Edinburgh, Glasgow, and other places, but, so far as he was aware, no matter what need there was in a locality, no attempt was made, outside London and Edinburgh, to have examinations brought within the reach of the students. He suggested that examinations might be held once every year, or two years, in the university towns of Scotland, and that an advanced pass in the Science and Art Department in chemistry and botany, ought to stand as part of the intermediate examination. If the society were to supplement teaching, and have the teaching done by pharmaceutical chemists—if they did it in some such way as the City of London guilds, and gave grants for the number which passed—he thought the thing would be very easily worked, and would be an inducement to pharmaceutical chemists to take up the teaching in the various centres, and students would have an opportunity then of getting much better education than at present.

Mr. SIEWRIGHT CULLEN thought they should think a little before voting for this measure. The Bill seemed to indicate that chemists and druggists were at present perfect failures.

The CHAIRMAN said if the measure were carried out as proposed, not one out of thirty of the existing chemists in the country could keep open shop. He maintained that the profits of a business in the country would not pay to keep two qualified men and the owner himself, and he held that would be necessary if the Bill passed. Some provision should be made for dispensing poisons in country districts, where there might be some twenty or thirty miles between the places where at present they could be obtained. Much of the mischief of which they had to complain was not done by co-operative stores, but by those inside the trade; and as long as that continued it would never be a trade or business worth carrying on by qualified men, unless they joined as a corporation and union to maintain their prices and their dignity as a profession. (Applause.)

Mr. SHEPHERD (Souter & Shepherd, Aberdeen), was of opinion that, if the curriculum clause were adopted and introduced into the Bill, it would cause serious inconvenience to chemists and druggists, and, he thought, a great deal of extra and useless expenditure on the young men themselves.

Mr. CARTEIGHE was invited to reply. There were, he said, a great many things in Mr. Giles's speech with which he cordially agreed. Practically Mr. Giles had sketched a new Pharmacy Bill. Of course Mr. Giles was younger than some of them, and perhaps he would take consolation from the fact that they had all these things through their heads before; and the worst of it was that when they got various classes of men registered in connection with a trade or profession it was very difficult to begin a clean sweep or abolish one class. The Government would seriously object to Mr. Giles's proposition that it was desirable to require all

chemists in business to pass the higher grade of pharmacists. This must be a voluntary grade giving a higher standing. As to the curriculum, they must have evidence of knowledge acquired in the process of teaching, or they must very considerably extend their examination. A suggestion had been made as to whether there should not be a week of examination. That was just it. The question was whether a week's examination, with the attending fees, would be more costly than the short curriculum. (Applause.) If there was no examination, their logic would be incontestable, but there was examination, and the power was in the hands of the examiners to raise or modify it, and he said no man could pass this examination in the ordinary way without getting assistance from someone outside. Was it not far better that the assistance should be distinctly and definitely arranged for them? Their apprentices went to Edinburgh and to Aberdeen for assistance, and it was a perfect fallacy to say that the average apprentice did not get assistance in a certain part of the subject before he went to the examination. As far as expense was concerned, he thought the plan suggested by the Council was far cheaper. As to local centres, he asked why Aberdeen men should go to Edinburgh and study for three to six months before examination, and why should Dundee men go there? He thought his friends in the North were rather pessimistic. He was asked if the men in the past had been failures. It was not his place to say that, but this he would say—that he was responsible for having plucked many a man who was competent and passed many a man who was incompetent. That was the evidence he gave before the Council of the Pharmaceutical Society as examiner. As he sat in the chair at the examination that was the observation he made. Men who came with a quick memory and well posted deceived the examiners and went through, but the slow, steady lad with sterling qualities, but a little slow in his manner, was plucked. Why? Because they approached the men on the principle that they did not know anything. It was not an easy thing to tell by a mere examination what a man knew. The state of a man's nerves and his health and the question whether he slept the night before—(laughter)—would make all the difference at an examination. The opinion of the examiners in Edinburgh was the same as that of the London men—in favour of the proposed curriculum. If they wanted to have no interest in the apprentices he had nothing more to say; but the Pharmaceutical Society was bound to protect the educational interests of those who were entering the profession, and every member of the trade was bound to sacrifice something to help these men along. Mr. Carteighe spoke in favour of the five years' apprenticeship system which exists in the north of Scotland, and wished such a practice was prevalent in the south. If the provision in the Bill did nothing more than afford evidence of *bonâ-fide* apprenticeship it would be a great advantage to everybody. His dream was that in the future there should be departments of pharmacy attached to the University of Aberdeen, as well as to other universities, and that a degree or title should be given in pharmacy, and the students registered right off. He was only the President of the Society for a year, and might be turned out in a year. The Council could not bind their successors, but he did think there were amongst them men like Mr. Paterson—clear-headed men—who would never allow the Council to do anything contrary to the broad views he had laid down in his opening remarks. (Applause.)

The resolution was unanimously carried, and a vote of thanks was very cordially awarded to Mr. Carteighe for his presence and address. The conference lasted three hours.

WITH THE YOUNG ABERDONIANS.

In the evening there was a meeting of the Chemists' Assistants' and Apprentices' Association in the same place. This was specially called to hear an address by Mr. Carteighe. Mr. George Cowie, President of the Association, was in the chair, and introduced Mr. Carteighe, who, addressing his young friends, said that one of the most difficult tasks he had to perform was to talk to young people. He felt that he should like to be exactly of the same age as they; and he should like to put anything he had to say from a standpoint of something like thirty years ago. The most of those present, he believed, were connected with the calling of pharmacy (he would not call it a profession, nor would he

call it a trade), and he wanted to impress upon them that no man in pharmacy could get a living unless he carried on his occupation, or anything else they may call it, in a true professional spirit. (Applause.) He did not believe the public cared two straws what they called themselves, but if they brought to bear in the ordinary avocations of life in connection with pharmacy those attributes which were supposed to be associated with the higher professional walks, he thought they should get professional remuneration and professional recognition; and if they got that, they need not care what they were called. It was true they kept a shop; but they must remember the notion of a shop was very different from what it was fifty years ago. There was a time when the rich bankers of the country were regarded as pawnbrokers, and their social relationship in the State was that of a man who kept a shop; but these times were altered. The principal of a banking-shop was now married to a daughter of the Prince of Wales. (Applause.) It was a mere accident that they kept what people called a shop, and others a pharmacy; but he might say he was not ashamed to act professionally in his shop, and to receive a professional remuneration for what he did. (Applause.) He did not allow the accident of his keeping a shop, which was a necessity of his existence, to depreciate his personal knowledge and experience; and if they in the course of their studies would adopt the same view, be utterly callous of what they were called, and observe a professional spirit in their calling—not the spirit of a man who talked about the price of certain ingredients or mixtures, and so on, but from the point of view of brain-power expended for the benefit of the public, for its interest and protection—then he thought they would command success to themselves and the respect of their customers. (Applause.) The public would not regard the value of brains until they were taught their value. They had, in fact, to educate the people who came to them before they were able to respect them. There was nothing that more impressed him than that in the future, in regard to pharmacy, medicine, and every intellectual calling, they must take care to educate the public, and for this purpose they must plunder them. He did not mean it as an offence; but he knew of no services in the country that were rendered so ungrudgingly as those of their profession. While he said that, no one succeeded in the profession unless they exacted from an ignorant public the value of their services. He then proceeded to say that every apprentice and every improver present had to depend for success, not on the way in which he passed his examinations, but on his own intelligence and intellect; and the practical outcome of his own experience was that the future of pharmacy rested upon themselves, and not upon any Act of Parliament. He was of opinion that the young man who knew twice as much as was required by the schedule was the one who was not only to gain distinction in the future, but also the man who was likely to make the most money. He himself had as much respect for examinations as anybody, but all educationists realised the unsatisfactory character of examinations. He wanted everyone to look upon their examination as a mere bagatelle, and advised them not to risk their reputation upon that examination if they had the slightest doubt that they were not fit to pass it. (Applause.) The examiners of the Pharmaceutical Society were not cats put there to catch mice; but their business was to lie back and let the mouse show what he was made of. (Applause.) He wanted to impress upon them that knowledge in regard to pharmacy was of the highest account, apart from every form of examination. The medical profession had now to undergo five years' curriculum instead of four, and, as they were being taught more exclusively medical and surgical subjects, the occupation of the chemist and druggist was becoming more responsible. The substances they had to deal with in their daily practice were ceasing to be of the character of Epsom salts, sulphate of zinc, and blue vitriol. In no city in England were there the same facilities for assistants becoming efficient in their profession as in Aberdeen—(applause)—and he expected that when they came to be examined they would not only pass their examination, but would have imparted into them by Mr. Cowie, their president, an enthusiasm for knowledge *per se*. He had only to remind them that, after all, the processes of State regulation in regard to all occupations and professions

was one of stimulating knowledge in its broadest and widest sense; and they must not regard work for the acquisition of knowledge as labour, but rather as a pleasure. (Applause.)

The address was heartily appreciated, and at the conclusion a vote of thanks was awarded to Mr. Carteighe with acclamation.

DUNDEE.

The meeting at Dundee was held in the Council Chamber of the Town Hall on Tuesday afternoon. There was an attendance of about forty members of the trade belonging to the town and neighbourhood. Mr. Charles Kerr, President of the Dundee Chemists' and Druggists' Association, and a member of the Scotch Executive, presided.

The CHAIRMAN said Mr. Carteighe had come before them to expound the latest phase of pharmaceutical politics. They were all much indebted to him for coming so far north in such wintry weather. Mr. Carteighe was a man of marked ability, and had done yeoman service to the Pharmaceutical Society for many years. He looked upon Mr. Carteighe as the Bismarck of the Pharmaceutical Society, and they did not wish to see him lowered over the bulwarks when they saw rocks ahead. He was sure all present would be glad to see their worthy President in person, and he hoped one result of the President's tour would be to increase the interest in matters of pharmacy and in matters affecting the Pharmaceutical Society. It was a melancholy fact that many outsiders who never joined the Society, grumbled at its work. The only remedy was that all outsiders should become members and then use their voting powers, and thus get all they wanted. They ought to become members on higher grounds than mere personal advantage. They ought to become members of the Society as good citizens for the good of the whole profession, and he trusted the time was not far distant when all registered chemists would be members of the Society, and then they would be a power to move mountains.

Mr. CARTEIGHE, who was applauded on rising to speak, at the outset expressed his thanks for being privileged to address so large and influential a meeting. At considerable length he then gave a history of the Pharmaceutical Society, of its founder, Jacob Bell, and of the powers which had been conferred on it by the Legislature in the various Acts of Parliament passed between 1852 and 1869. He then pointed out the necessity for further legislation, and gave details of the draft Pharmacy Acts Amendment Bill, which has been approved by the Council of the Pharmaceutical Society; and concluded by stating that it dealt with the subject of education, of the Society itself, and in it they also asked for certain further privileges for registered persons, and claimed that chemists and druggists should be exempt from jury service.

Mr. D. H. FERRIER said, whatever differences of opinion there might be with regard to the clauses of the Bill—and he presumed there would be some differences amongst them—there should be no question with regard to the ability with which Mr. Carteighe had explained the clauses of the Bill to them. (Applause.) It appeared to Mr. Ferrier there were some things in the Bill which they could all agree to very heartily. The clause with which he most readily concurred was the one which gave power to divide the qualifying examination into parts. He had known young men who had been greatly discouraged in this respect. They had gone up for examination, and had passed, perhaps, in two subjects, but had failed in the third, and in consequence they were told to go back and study for three or six months, and then return and go over the same subjects again. The Bill meant, he supposed, when a young man passed in chemistry or botany, that he did not require to go up and pass in these subjects a second time, supposing he failed in passing the third subject. To the curriculum clause he could not agree. He did not see the necessity for putting such hard restrictions upon the trade when the Bill gave so little protection. If they were to curtail the privileges by putting heavier burdens on those who came after them, what advantage were they to get for these heavier responsibilities? Altogether the Bill seemed to him to be an educational Bill, and chemists as traders would derive very little benefit from it supposing it were passed. The only other clause calling for attention was the seventh,

and that was a clause which had given rise to great contention and divergence of opinion among the registered chemists and druggists of the country. On the face of it, it seemed to confer a privilege to allow registered chemists and druggists only to dispense and compound physicians' prescriptions; at the same time it left to companies the whole of the rights which they had assumed. He could not see, if it was illegal for an individual to open a shop and dispense prescriptions, why it should be legal for some individuals to unite together to do the same thing. When they were going to Parliament at least an honest attempt should have been made to get a companies clause inserted. If that were done satisfaction would be given to a large section of the trade.

Mr. MASON (Dundee) asked what was the exact meaning of the words at the end of clause 2, accepting certificates of service from persons qualified in accordance with the law of the country in which they are carrying on business, "to practise pharmacy in that country."

Mr. CARTEIGHE replied that "that country" meant any country. It meant that a pupil who had been with a registered chemist and druggist in any part of the world, and who could present evidence of that, could come up for examination.

Mr. MASON next directed attention to the importance of examiners being empowered to accept certificates from other bodies, and remarked that the proposed power might be extended considerably. He also desired to know what was meant by "classes"; to what extent these classes might be presumed to go; and, further, whether it would be possible to continue or extend the idea of receiving other certificates in lieu of the examinations of the Pharmaceutical Society. As there were many examining bodies of importance in the country, it seemed to Mr. Mason that the certificates granted by them should be accepted in lieu of the certificates of the Pharmaceutical Society. If such an arrangement could be made useful for passing purposes, it would be a great boon to the young men of the rising generation. (Applause.)

Mr. WILLIAM DOIG (Dundee) expressed the opinion that the educational part of the Bill was an admirable change for the better. There did not seem to be any desire to lay heavier burdens on their young men, and the outcome of the Bill was that the young men should have the privilege of taking the examinations in three or four times, but, at the same time, they would have a much stiffer one at the close. That was the tendency of all educational work throughout the country. Every year the standard of education was rising, and heavier burdens were gradually being put on those who had to pass examinations. Dundee, with her University College, her Science and Art Institute, and other classes, was capitally situated from an educational point of view, and young men who wished to train for the trade of a chemist and druggist had a fine opportunity, and, with these advantages which could be offered, there was no reason why Dundee should not become a centre for examinations. Mr. Doig afterwards referred to the trading clause, and remarked if a clause had been inserted in the Bill dealing with so-called co-operative stores they could bring all their influence to bear on members of Parliament and others, and probably in time much good would result. If Mr. Carteighe had ventured a little further in that direction than he had done he might have found an amount of support which would have tended to get the evil modified. Even if he yet recast the trading clause it might be well, and it would be better to fight for two or three years and get a good Bill than take an imperfect measure. Mr. Doig believed if the Pharmaceutical Society acted in that way it would form a splendid opportunity for bridging over the disloyalty which characterised the Pharmaceutical Society and the chemists and druggists. On the ground of fairness the Pharmaceutical Society might recognise a little more than they had done in the past the fact that the chemists and druggists were traders, and that they were making their income as traders. He had no ambition to rise to the status of a profession, and he felt as much pride in being an honest trader as a professional man. (Hear, hear.)

Mr. SIMPSON (Forfar) spoke of the difficulty experienced in procuring apprentices in small towns, and advocated the holding of examinations in large centres such as Dundee.

Mr. STORRAR (Kirkcaldy) said, as a member of the Council, he was bound to support the resolution of the Council re-

garding the Bill. He was sure they all bade Mr. Carteighe a hearty welcome to Scotland, and admired the pluck, ability, and clearness with which he advocated the Bill. It was for the meeting, after what they had heard, to say whether they were prepared to support the Council. Legislation was absolutely necessary, and the form it should take was now before them. He desired, further, to tell the meeting that the Council and the supporters of the Bill were as convinced as any could be that the legitimate trade was very seriously affected by company trading, and they were perfectly satisfied as to the need that existed for a remedy. Was the remedy to take the shape, as Mr. Carteighe had tried to prove, of increased qualification on the part of the legitimate trader, or rather were they to try protection? Referring to the Society, Mr. Storrar remarked that in Scotland they had not been doing their duty towards it, and he declared that if they wished for pharmaceutical legislation they could only get it by joining the Society, and thus increasing the influence of the body who could urge it on. (Hear, hear.)

Mr. JAMES RUSSELL (Dundee) then moved:—

That this meeting thanks the President of the Pharmaceutical Society for his able exposition of the Pharmacy Bill, and generally approves of the action of the Council in framing and in introducing it.

Mr. KERMATH (St. Andrews) seconded.

Mr. DOIG inquired whether he was to understand that in voting for the motion the meeting practically pledged itself to support the Pharmacy Bill? If that was so, he felt that he must propose an amendment.

Mr. FERRIER remarked that he had the same query to ask. There were some parts of the Bill which he could not see his way to agree to.

Mr. DOIG, continuing, said he cordially supported the first part of the motion, which was that a vote of thanks be awarded to Mr. Carteighe for his exposition of the Bill.

Mr. FERRIER said he was ready to second that if Mr. Doig put it in the form of an amendment.

Mr. CARTEIGHE said he wanted the meeting to say what it meant. He did not want thanks. He wanted those present to say one thing or another. Let him go back to the Council and tell them whether they approved or disapproved of the Bill. Merely to thank him was no use whatever. (Laughter.)

Mr. DOIG replied that if by the motion they were morally bound to support the Bill in the House of Commons, he was not prepared to support it.

The CHAIRMAN then read the motion, and asked all in favour of it to hold up their hands, when twenty-one hands were held up. He next requested any against the motion to hold up their hands, but no response was made, and he thereupon declared the motion carried.

Mr. CARTEIGHE thereafter thanked the meeting for giving a definite expression of opinion, and for the patience with which they had listened to his address.

On the motion of Mr. DAVIDSON (Montrose), a vote of thanks was awarded to Mr. Kerr for presiding, and the proceedings terminated.

EDINBURGH DINNER TO MR. CARTEIGHE.

Mine host of the Royal Hotel, Prince's Street, had a tempting *menu* for the pharmaceutical forty who met in his house on Wednesday night; and in keeping with the *menu* was a toast-list long enough to aid digestion, if not quite equal to seeing that process complete. Mr. William Gilmour, F.R.S.E., Chairman of the Executive of the North British Branch, was in the chair, and the offices of croupier were performed by Mr. J. F. Ewing, of Duncan, Flockhart & Co., occupying the vice-chair, a chill having unfortunately prevented Mr. J. R. Young taking that position. In addition to the principal guest of the evening, who sat in the place of honour, there were several distinguished men present, Dr. Peel Ritchie representing the Royal College of Physicians, while the wholesale trade was fairly represented. There has not been a pharmaceutical dinner of the same pretensions in Edinburgh for some years.

After dinner the chairman intimated apologies from Sir Douglas MacLagan, M.D., Professors T. R. Fraser, Bayley

Balfour, and Crum Brown, Dr. Stevenson Macadam, Dr. Cleghorn, Provost Watt, of Haddington, and some others.

The Royal toasts having been duly honoured, the CHAIRMAN submitted the "Army, Navy, and Reserve Forces," to which Mr. STORRAR, of Kirkcaldy, as a major of the volunteers, replied. The major had never been able to understand why so few chemists are volunteers, and now he gave expression to his feelings with the remark that chemists should make good defenders of their country, since they were accustomed to mortar-practice, and had a reputation for charging—at which there was a laugh without a surgical operation.

Dr. RITCHIE submitted the next toast—"The Pharmaceutical Society." After referring to the incorporation of the Society during the Queen's reign, Dr. Ritchie said that it had made progress—sure progress—since its formation, so that now, owing to the progress of pharmaceutical skill, medicines were more agreeable than in the time when Macbeth said, "Throw physic to dogs." The Society's progress had benefited the public as well as its own members. He thought that the attempt which the Council was now taking to get a proper regulation of the course of study, as well as regulation in other respects, was appropriate to this the jubilee year of the Society. They were met that evening to give a welcome to Mr. Carteighe, the moving spirit of the Society, who had discharged his functions in a splendid way, as was shown by his frequent election as president of the body. That position he had merited by his personal ability, which was noticed early in his career—for he was quite a young man when it was predicted of him that he would be a future leader in pharmacy. Dr. Ritchie thought that Mr. Carteighe was now doing a great work for pharmacy by stimulating all its members to unity of action in regard to the legislative proposals which were now before the trade, and he asked the company to drink heartily to the toast, with which he coupled the name of Mr. Carteighe.

Mr. CARTEIGHE, in replying, said he was in Scotland giving information regarding the Pharmacy Bill, and explaining the difficulties which attended attempts to amend the existing law. In point of law pharmacy was a profession, and it was on professional lines that they must approach Parliament. It was necessary, when they asked for additional privileges, that they should promise added competency—hence the necessity for that part of the Pharmacy Bill which dealt with education; but he would remind them that no measure could yield immediate benefits. The process was necessarily slow. Referring to the Pharmaceutical Society, he said it was respected throughout the world, and he thought it wrong to cavil at its endeavours to improve the status of the pharmacist. He rather advised a careful upholding of their dignity in all transactions with their clients. At present there was a struggle in all the professions; but it was possible, he thought, by combination to do much to remedy the evils which they had to combat. He believed, for example, that it was to the best interest of medicine to educate the public to see that the prescriber deserved fair remuneration for his skill and knowledge, and that the dispenser was also equally deserving of remuneration for his. Referring to what was said about the Council, Mr. Carteighe remarked that it was scarcely fair to cavil at a Council elected on such democratic principles. In 1868 all chemists who were in business were registered without fee. Now those individuals were the most bitter opponents among those who were admitted without examination. He would remind them that a corporate society could not do for the individual what he could and should do for himself. As a matter of fact, the work of dispensing was now being equalised, and historic houses were affected by skilled chemists now found in country towns and villages, who were competent to dispense the most difficult prescription, and while this was so it could not be said that pharmacy was not progressing.

Mr. J. B. STEPHENSON next proposed "The Medical Profession," and referred to many names honourably associated with Edinburgh.

To this toast Dr. PEEL RITCHIE replied.

Dr. INGLIS CLARK proposed "The Honorary Members"; and in spite of the fact that none were present, the toast was duly honoured.

Mr. Storrar was down to propose "Trade Interests," but

by this time he was well on the way to the "lang toon," and in his absence the Croupier proposed the toast.

Mr. RICHARD CLARK (of Raines, Clark & Co.) replied, and had the temerity to say that he found the craft in financial matters analytically careful.

"The Drug Trade in Glasgow and the West" was submitted by Mr. JAMES MACKENZIE, and Messrs. ALEXANDER KINNINMONT and DANIEL FRAZER replied.

Then came more compliments in quick succession: "The Chairman," submitted by Mr. Peter Boa; "The Croupier," by Mr. Thomas Maben; and "The Ladies," by Mr. David McLaren, the reply to that being by Mr. McGibbon. A complimentary and telling little speech was made by Mr. Carteighe in proposing the health of the assistant secretary (Mr. J. Rutherford Hill), who feelingly replied; and lastly, Mr. Michael Carteighe, as "a jolly good fellow," was toasted at the initiative of Mr. Richard Clark, who put it that the President was a "first-rate, all-round fellow."

In the course of the evening Mr. Carteighe sang "Father O'Flynn" and "Killaloe" in characteristic fashion, and this part of the entertainment was also joined in by Messrs. Charles Arthur, W. Inglis Clark, D.Sc., Richard Clark, Thomas Maben, David McLaren, and Thomas Thompson (James Robertson & Co.).

GLASGOW.

The meeting at Glasgow was held on Thursday, at the Waterloo Rooms, at 6.30 P.M. There was a large attendance.

Mr. MCADAM, of the Apothecaries' Company, who presided, said that, observing that the circular calling the meeting invited registered chemists only, he had intimated to the secretary that he would not take the chair on such a condition. He considered that the meeting should be open to anyone connected with the trade, as assistants and apprentices were equally interested in the proposed Bill. (Applause.) It was upon that understanding that Mr. Carteighe was invited to Glasgow. He would have liked to have seen more medical men interested in the question: but they seemed to be asleep. It would be better that the trade should know now what the proposed changes were, rather than that they should wake up to know them only after the Bill had passed—if, indeed, it did pass. They should, in fact, say if the draft Bill was what they wanted. Especially should they consider how it would affect the trade, not only in the large towns but in the country. (Applause.)

Mr. CARTEIGHE then proceeded to explain at great length the various clauses in the draft Pharmacy Act Amendment Bill approved by the Council of the Pharmaceutical Society, and went on to say that they might think he was a "General" Booth in disguise; but he had come to Glasgow because he believed his brethren did not fully understand the Bill, and, further, it was a pleasure to him to make acquaintance with his brethren in the trade in Glasgow. He was a chemist and druggist like themselves, and had had a long apprenticeship to the business. He had given the Society a fair part of his time, and the desire of the Society was to get rid of every feeling of jealousy. He asked whether they and the other members of the trade would support the Bill. Their support could be given most effectively if they would become members of the Pharmaceutical Society. At present the Society had only about 4,000 members, but, if it had 12,000 members, then it could go to the House of Commons and speak with authority in the name of the trade. If chemists generally did not approve of the Bill, it would be absurd on his part to waste his time in the lobby of the House of Commons. (Applause.)

Mr. KINNINMONT said Mr. Carteighe had delivered a very able speech, and, in his remarks, he never struck below the belt—he was a very honourable opponent; but there were some points he (Mr. Kinninmont) would like to get settled. He considered that the Pharmaceutical Society should aim to establish the Act of 1868 upon its original lines, and he urged that there should be an explanatory clause in the Bill declaring that chemists and druggists within its meaning were men carrying on businesses of their own. Mr. Kinninmont proceeded to discuss the judgments in some of the important cases under the Act on certain points.

Mr. CARTEIGHE remarked that all that argument was before the judge, and said that if they wanted to alter a

law they should try and do it by increasing the membership of the Pharmaceutical Society. He was one of those who constructed the Act, and his recollection differed from that of Mr. Kinninmont.

Mr. KINNINMONT said there was no trace of an intention to fix responsibility upon assistants, and he thought there should be an appeal to the Privy Council on the subject. They should get an explanatory Act to restore its original meaning. His whole contention was that he wanted the Act as it was originally.

Mr. CARTEIGHE: Might I ask whether you would not have the Bill unless that was included?

Mr. KINNINMONT: I would rather have no legislation at all. I would rather have the trade free. (Applause.) Freedom of trade in drugs would not injure them at all.

Mr. CARTEIGHE: But we are tied up. If we could go back and not be tied up it might be better; but the Government is determined to restrict us in the sale of poisons.

Mr. LAING said he did not want to go back to 1868, he preferred to keep to 1891. (Applause.) In Glasgow the profession of pharmacy had been lowered, but it was now on the rising tide. They could yet be benefited. The stores were now beginning to lose their power of doing injury to the trade, which did not fear fair competition, but the competition of the stores was unfair. The clergy were the chief organisers of these stores. He thought the stores should be disestablished before the Church. It would not be just to crowd the assistants out of existence. Many of them in Scotland and England had been in the trade for twenty years, were married and settled down, and they considered themselves quite entitled to act as assistants. The law should therefore recognise them without requiring that they should submit to a Preliminary examination. Having so long acted as assistants should entitle them to dispense with a Preliminary examination. He moved a resolution in accordance with these views.

Mr. WALKER, in seconding the motion, said he had been asked by a number of assistants to bring that matter before the meeting. He held that it would be unfair to wipe the assistants out. They should be allowed to continue to assist in the shop of a duly-qualified proprietor. That was all he asked. He did not plead for himself, because he was in the wholesale trade, although he was interested in the retail.

Mr. CAIRNCROSS said he also was connected with the wholesale trade, but some day he might wish to go behind the counter, and it would be very hard if he were not to be allowed to do so, especially after having had such a large experience.

Mr. CURRIE also thought it would be very hard for those who had been at business for many years to begin now to be qualified; it was not easy for a man of thirty or forty, with a large wife and small family—(loud laughter)—to begin and prepare for an examination.

Mr. LAING put his motion in this form:—

That this meeting approves generally of the Pharmacy Act Amendment Bill, and is of opinion that the Council of the Pharmaceutical Society deserves the support of the entire trade in its efforts to promote further legislation in the interests of pharmacy; and further that it should be compulsory to pass the Preliminary examination before apprenticeship, and that unqualified assistants over fifteen years' standing should be admitted to the register as assistants.

Mr. FINLAY seconded this motion, but

Dr. LEE proposed, as a direct negative, that they disapprove of the whole Bill.

Mr. BOYD seconded. He was opposed to an enforced curriculum, because it would prove a great hardship to many. They might not feel its effects so much in Glasgow, but the chemists in the country districts would feel it, because they would have no classes to which to send their apprentices. If the Bill were passed many shops in the country would have to be shut up. He asked them would that be for the benefit of the public? It would be better, he thought, for the public to have only moderately educated men to dispense prescriptions, than to have no shops at all. (Applause.) On a vote being taken, eight voted for Dr. Lee's amendment, while the rest of, and the great majority of, the meeting voted for Mr. Laing's proposal.

Mr. CARTEIGHE and the Chairman were thanked for their speeches, and the proceedings concluded.



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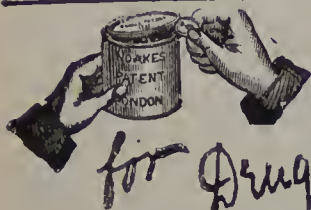
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The Chemist and Druggist

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N.B.]—The next issue of "The Chemist and Druggist," January 31, being the Winter Special Issue, with illuminated wrapper, has to be sent to press much earlier than usual, and although we shall receive Advertisements FOR THIS SUPPLEMENT ONLY up to Friday Morning, it would be a great assistance to us if those who have announcements to make next week would let us have them on Thursday or earlier. The issue will be of exceptional value to all classes of advertisers, and should be missed by none.

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FOR sale, Surgeon's Retail and Cash Practice in an East-end main thoroughfare; large double-fronted and well-fitted shop, with large consulting-room and eight-roomed house; in present hands for last 12 years; would suit Surgeon or Prescribing Chemist; terms easy to an immediate purchaser. For particulars address W. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PLYMOUTH.—Messrs. Berdoe & Co. are instructed to sell by tender, as a going concern, the lease, goodwill, stock, and fixtures of the Chemist's Business situated at No. 55 Coburg Street, Plymouth; same hands 13 years; owner leaving the trade; handsome mahogany fittings by Trebble; good stock; excellent nine-roomed house, in perfect repair; bath-room; garden, with fruit trees; private and back entrances; returns are £400; no patent or outting trade; unopposed position; can be greatly increased; net profit 40 per cent.; offering an excellent opportunity to those desirous of purchasing a business at a reasonable price, with plenty of scope for increasing the returns; a very low reserve has been fixed. Tenders received up to Saturday, February 7. Full particulars and tender-forms on application to Messrs. Berdoe, 30 Jewry Street, Aldgate, E.C.

WATERLOO VILLE, HANTS.—Messrs. Berdoe & Co. are instructed to sell by tender, as a going concern, the lease, goodwill, stock, and fixtures of the unopposed Chemist's Business, situated at Waterloo Ville (3 miles from Osobam and 4 miles from Havant); returning over £600 yearly, and steadily increasing; shop is well fitted, and stock in excellent condition; exceptional good house; nine rooms; hot and cold water all over premises; bath-room; garden, with fruit trees; Waterloo Ville is fast growing, is much frequented by invalids, near the sea, and very healthy; offering good opportunity to energetic man, or those seeking a genuine business where health is a consideration; a low reserve has been fixed. Tenders received up to Saturday, February 7. Full particulars and tender-form on application to Messrs. Berdoe, 30 Jewry Street, Aldgate, E.C.

JUNIOR : 22; Dispensing and good-class Retail. Lucas, 55 Chestnut Grove, Birkouhend.

ASSISTANT or Dispenser; outdoors; qualified. "Radix," 325 Kensington Road, S.E.

LONDON ; qualified; good address; disengaged 29th inst. "Statim," 9 William Street, W.

ASSISTANT or Dispenser to Surgeon; aged 24. A. Johnson, 62 Long Lane, Smithfield.

AS Manager or temporary; qualified; aged 37; abstainer. "Chemists," 3 Culmore Road, Peckham, S.E.

LOCUM-TENENS or Munger, by experienced Pharmaceutical Chemist (exam.). Heald, Sleaford.

TEMPORARY ; permanency; qualified; experienced; 32; tall. W., 4 East Terrace, Fairlawn Park, Sydenham.

WHOLESALE.—Dry, Wet, or Export; 10 years' experience; or Locum-Tenens.—M. C., 64 British Street, Bow, E.

AS Assistant; accustomed to good-class Dispensing and Prescribing business; 11 years' experience; aged 27. D., 19 Lower Wastgate Street, Gloucester.

AS Assistant or Dispenser; qualified; 6 years' experience. H. W., care of Rev. J. Williams, Baptist Minister, Brynmawr, Breconshire.

AS Senior, Manager of Branch, or Warehouse; 25 years' experience; Wholesale and Retail. L., 110 Hucknall Road, Nottingham.

DISENGAGED : 23; tall; good references and experience; moderate salary; good Prescriber; unqualified. Royle, 18 Queen's Road, N.W.

SITUATION (outdoors); unqualified; thoroughly competent; married. K., Rose Cottage, Chipping Hill, Witham, Essex.

WHOLESALE ; good experience in Wet and Dry departments. X. Y. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

AS Assistant; good Mixed Business reference; many years' experience disengaged. "Beta," Mrs. Pennington's, Bridge Street, Workson, Notts.

TO Manage a Branch; can Extract Teeth, &c.; qualified; married; good Prescriber; aged 40. "Chemists," 14 Gerrard Street, Aston, Birmingham.

JUNIOR : 31; 7 years' experience; town preferred. Tranmer, Bishop, Middleham, Ferry Hill.

MANAGER or Senior; outdoors; disengaged on February 2; Major qualification. Address, A. B. Messrs. Barrow, Harveys & Co., Giltspur Street, E.C.

ASSISTANT or Manager; Dispenser, good Prescriber; business-man; Minor; 26; abstainer; large experience. Birch, Hind Hill, Heywood, Lancs.

MANAGER ; Dispenser; qualified; aged 33; married, no family; thoroughly reliable; experienced; references. "Alpha," care of Wilson, Aldwinkle, Thrapstone.

ASSISTANT or Manager Branch; 26; Major; experienced; highest references; London preferred; stato salary. "Pharmacist," 71 Wilmslow Road, Didsbury, Manchester.

JUNIOR or Dispenser; good-class business; time for study; 7 years' experience; excellent testimonials. "Radix," Office of THE CHEMIST AND DRUGGIST 42 Cannon Street, E.C.

MANAGER or Senior; 27; married, no children; permanency; Minor; 12 years' varied experience. "Tudor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A YOUNG Man, good appearance, tall, speaking English and French fluently, seeks an engagement as Improver; 3 years in the business; quick, intelligent, good server. Miss C., Eviagton Place, Ashford, Kent.

SITUATION required as Manager of Warehouse; good references; varied experience, including knowledge of office and laboratory work; salary moderate. B. F., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Advertisers.—Gentleman (27), now preparing the advertisements and attending to the correspondence of advertisement department of large patent-medicine firm, shortly at liberty. "Lex," 45 Shaftesbury Road, Ravenscourt Park, W.

JUNIOR Assistant; unqualified; aged 24; height 5 feet 10 inches; good Extractor; Mechanical Dentistry; 8 years with Ohomist; good character and references; gentlemanly; disengaged February 1. Address, M., 88 Tennyson Place, Bradford.

TRAVELLER, with connection in the North of England and Scotland, desires re-engagement; Drug or Sundries. "Manchester," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PART-TIME: London (S.E.) or Manchester preferred; aged 25; height 5 ft. 11 in.; abstainer and non-smoker; disengaged February 10th. "Tempus," 17 Minot Square, Otley, Yorkshire.

MANAGER; branch or otherwise; long experience; excellent references; disengaged; height 5 ft. 9 in.; aged 31; unmarried; sober; well up in Dental Extraction and Stopping. "Dens," 20 Avenue, Wimborne.

TRAVELLER. 10 years' experience, desires engagement with Wholesale Drug House, or would take responsible position in office; thoroughly acquainted with the trade. Address, "Rue," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, in the Midlands, a situation as Manager for a branch, or Dispenser to a Medical Man; good Prescriber and Dispenser; 9 years in present situation. Apply to Southall Bros. & Barelay, Birmingham; J. R. Mowatt, 109 High Street, Cheltenham.

A YOUNG Foreigner, aged 28, speaking English, French, German, and several other languages, having been First Assistant in a high-class Parisian Pharmacy, seeks a situation in London; undeniable references. "Foreigner," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER.—A gentleman of large commercial experience, well known to the trade, representing a Sundries house, is open to engagement with firm of Manufacturers or Wholesale Druggists on commission and part expenses; ground covered, South Coast and adjacent counties. Address, "Euonymin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

FOR SALE.—Bottles at Manufacturers' original estate prices; best French goods, far superior to the ordinary English make:—1-oz. round essences, plain, 7s. gross; stoppered, 18s. 6d. gross; ½-oz. ditto, plain, 5s. 9d. gross; 1-dram vials, 2s. 9d. gross; ½ dram ditto, 2s. 7d. gross. Also a mahogany toothbrush-case, similar to Mow's 10s., quite new, cost 35s., price 20s. Baraett & Co., Perfumers, Moor Street, Birmingham.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hill's Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. **MINOR**.—Equations Simplified, 1s. Illegible Autograph Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

APRIL EXAMS.

TO STUDENTS.—Partial board and residence, with assistance in studies; 13s. 6d. weekly; full board on Sundays; pleasant, healthy suburb; a home from home; penny tram to Wills' or Muter's; references to past students: Minor and Major. "Pharmacist," 52 Ivanhoe Road, Denmark Park, S.E.

CROWDER & CO., Experimental Glass Blowers to the trade, manufacturers of all descriptions of glass syringes, nipple shields, breast-exhausters, sprays, homoeopathic phials, glass surgical instruments; all kinds of acids sealed in glass tubes; putters made to descriptions or drawings; all orders promptly attended to; experiments carried out, 83 Liverpool Road, N.

In the affairs of Mr. Edward Topliss, deceased.

ALL persons having any claim or demand against the Estate of the late Edward Topliss, of Wainfleet, All Saints, in the county of Lincoln, Chemist and Druggist, are requested to send the particulars thereof to Mr. John Henry Topliss, of Louth, in the said county, Draper, or to me the undersigned; and all persons who stood indebted to the said Edward Topliss at his decease are requested to pay the amount of their respective debts to the said John Henry Topliss or to me forthwith.

Dated this 30th day of December, 1890.

By Order of the Executors.

H. F. V. FAULKNER,
Solicitor, Louth.

J. M CORMICK,
4 Palace Chambers, 21 Victoria Street, Liverpool,
Accountant.

programme with ability and good humour, and has asked for discussion and criticism with an apparent candour which has gone far to disarm it. We are sorry to have to introduce the adjective to qualify the last credit we have named, or to throw any shade of suspicion on the genuineness of the invitations to a conference which have been so freely distributed among the chemists and druggists of Great Britain. But there is surely evidence enough by this time that in all his tourings the President of the Pharmaceutical Society has not had the smallest intention of taking counsel with those whom he is good enough to describe as his brethren, if taking counsel means, as most of us would interpret it, an equal readiness to take and to give advice. Mr. Carteighe's is a missionary enterprise. He goes to Manchester, and Hull, and Liverpool, and Cardiff, and Aberdeen, and Dundee, not to gather knowledge, but to convert the heathen. He has drafted a Bill: it is absolutely perfect—not a word too much, not a word too little: and with all the professions of taking the trade into his confidence, there is clearly not the remotest intention of modifying a sentence or a line in deference to the prevalent opinion. This may be all very magnificent, but it certainly is not conference.

As a reward for these valiant exertions on the part of the President, a very respectable-looking sheaf of resolutions is being garnered at headquarters, and will, we doubt not, be exhibited effectively before long. They will all count, but their intrinsic value can be weighed with an approximation to accuracy from our reports this week. The gentleman who moved the resolution at Aberdeen devoted nearly his whole speech to an argument against it. Neither there nor at Dundee nor at Glasgow does there appear to have been a single speech which Mr. Carteighe could in his innermost consciousness accept as a veritable endorsement of his or his Council's policy. The speeches of those most anxious to maintain the traditions of loyalty to the Pharmaceutical Society have been tinted with a shadow of discontent which it would be too mild to describe as a mental reservation. It is a pity that this should have been so. This time last year there was undoubtedly a general desire among the thinking chemists and druggists of Great Britain to unite under the leadership of the Pharmaceutical Society in support of a moderate, reasonable Bill, the aim of which should have been to advance on the lines laid down in 1868. This was the true parliamentary method. No one can read the history of pharmaceutical legislation published in our DIARY this year without perceiving that the lines of the Pharmacy Act of 1868 coincide fairly well with the views which our legislators have expressed a score of times over all through the century. But that Act has been lately discovered to have been a mistake—a wretched Poisons Act. To ask Parliament to strengthen it where it has manifestly failed is denounced as Utopian and ridiculous. The only chance to get a perfectly reasonable claim recognised by the Legislature is, according to the latest development of wisdom, to slip it in stealthily when nobody is looking.

Well, Liverpool, Manchester, Bristol, Sheffield, Hull, Cardiff, North and South Kensington, Brixton, St. Paneras, and now Aberdeen, Dundee, and Glasgow, and by next week, we suppose, Edinburgh, Carlisle, and Brighton, will have formally voted their adhesion to the proposals, definite on the curriculum only, vague as to possible benefits, and conspicuously inadequate as a declaration of chemists' rights, which have been put before them. The votes are given with protests, the protests are followed a week later by letters to this journal. So is history made.

One gentleman at Aberdeen, a supporter of the Council and eager for their policy to be carried into effect, thinks, under probable circumstances, Scotland should be excepted

from the curriculum scheme. The chairman said if the "dispensing" clause be passed and carried into effect, not one chemist in thirty can continue to keep open shop.

The heartiest supporter of the policy of the Council at the Dundee meeting was one of the leaders of the opposition to it in the Council itself. If Mr. Storrar and those who acted with him in the advocacy of the additional clause in the Council are "bound," as he implies, to haul down their flag after a single reverse, what have we who are of what was their way of thinking to depend upon? In the other speeches the "definite expression of opinion" was notably in support of the absent clause. For their "definite expression of opinion" Mr. Carteighe expressed his thanks.

The Glasgow meeting appears to have been distinctly hostile to the Bill, though it is perhaps desirable to explain that our report of the proceedings there is a telegraphic, and consequently a condensed, one.

THE FROST AND THE CROPS.

THE great frost, which seems still reluctant to relax the icy bonds in which it has so long held this part of the northern hemisphere, will as certainly be remembered by posterity as distinguishing the opening month of 1891 as the influenza epidemic is destined to render notable the commencement of 1890. With the sufferings caused to our poorer fellow-citizens by this awful winter existing charitable organisations have found themselves unable adequately to cope, while the paralysis of business caused by the closing of ports and rivers in all quarters of Europe is in danger of being succeeded by worse confusion, if sudden thaw should cause the great continental rivers to overflow and spread destruction around. Of the Central European ports Rotterdam and Flushing appear to be the only harbours of any importance which the ice-king has failed to subdue. Hamburg and Antwerp, which hold first and second rank among continental ports with respect to tonnage, have been closed for a prolonged period. Hamburg traders have made a gallant fight to keep their port open, and have been exceedingly reluctant to admit themselves beaten by the superior force of frost, although there is no doubt that the lower estuary of the Elbe is at this moment probably the most dangerous spot for vessels in the world owing to the ice-floes which beset it. The Baltic ports are all ice-bound, and in Western Germany the Rhine, which has not been frozen since 1856, and the Moselle are thickly covered with ice. Under these circumstances trade with Central Europe is practically suspended, and orders are kept back wherever possible. Germany contributes to our materia medica comparatively few articles of first-class importance, and none the prospective supply of which is likely to be seriously affected by the recent severe weather. From Southern France, on the other hand, we not only draw annually thousands of pounds' worth of essential oils and extracts, but any severe injury to the olive-oil crop of the South (though Provence oil is not comparable in commercial importance to the oils of Italy) is not unlikely to react, to some extent, upon the value of the Italian product. So far as materials for perfumery are concerned no accurate information of the damage, if any, caused to the prospective crop has yet reached us; but it is almost impossible to suppose that a winter which freezes the water in Marseilles docks, covers Monte Carlo and Cannes with snow, causes the mercury at Bordeaux and Toulouse to sink to 12° F., and jeopardises invalid lives at Biarritz by rendering that health-resort temporarily many degrees colder than Stornoway, should pass without working serious injury on the orange-trees and the delicate herbs and flowers of the Riviera. That the agricul-

tural districts of Italy have suffered serious damage is now beyond doubt. From Rome to Naples the surface of the country is reported to be covered with a sheet of frozen snow. The Sicilian mountains are covered deep in white, and from Calabria comes the same story. The gathering of the olives had been effected before the cold wave set in, but the weather, it is said, has had a serious effect upon the pressing of the oil. Essential oils are also advancing in price, and the Sicilian dealers affect to believe that before long they shall be able to realise three times as much money for their oil of lemon as they obtained one or two seasons ago. High lemon prices react upon the quotations for concentrated juice, and through these upon citric acid. It was well known that the lemon crop had suffered long before and quite independently of the climatic disturbances that have visited Italy; but such gales as are reported to have visited the Palermo and Messina districts a few days ago may be trusted to leave their mark upon all that grows. In Spain and Africa things are, if possible, even worse than in Italy. That snowstorms should howl through Madrid and Catalonia be frozen is not surprising, for certain portions of Northern and Central Spain are notoriously subject to severe climatic depressions; but when the cold drives jackals and wolves into the streets of Malaga and Valencia, and six degrees of frost are registered on the rock of Gibraltar, the semi-tropical products of the Peninsula are not likely to escape injury. And the thought that from Algiers, the last refuge (until Koch) of pulmonary sufferers, the snow extends landwards until it almost fringes the sands of the Sahara, should suffice to make the hero of Tarascon turn in his island-grave.

PROTECTIVE SCHEMES.

WE should not care to calculate how many proposals we have published since proprietary articles began to be "cut," having for their object the restoration of the lost profits to this interesting branch of business. Retailers are the most keenly interested, and they have naturally been the most prolific in schemes; the wholesale middlemen who have been cutting against each other have made one or two feeble attempts to get out of the corner into which they have shut themselves, and several times manufacturers have themselves sought to establish a control over the prices at which their products are delivered to the public.

The chances of success for the plans proposed by retailers have been generally based on the unattainable condition of trade unanimity. Only a representative of some thousands of chemists could effectively discuss with, not to say dictate terms to, the autocrats of commerce who have got their specialities firmly established in public favour. And no method of coercion emanating from the retailers has ever yet secured the adherence of fifty votes.

But manufacturers are in a different position. They can, if they like, attach a condition of the price of re-sale to every parcel they deal in, and it is not absolutely impossible for them to enforce such a condition, though in regard to articles of low price and wide general demand it is probable that the expense involved would swallow up the whole of the profit. We have had the opportunity of talking on this subject with the proprietors of many of the most popular specialities, medicinal and domestic, and we have arrived at a very fair general idea of the working of the proprietorial mind on the subject. We should say, as an average result, that our friends the proprietors are not inclined to be quixotic on behalf of chemists, but that they have generally a sincere regard for them and for the value of their co-operation, and, on the whole, a preference for the mainten-

ance of reasonable profits among the distributors of their goods. But, as a matter of fact, the cutting has not injured them. They are aware that it has tempted a considerable amount of imitation of their products, but this has been much more than balanced by the heavier sales induced by the lower rates.

Let us be reasonable. When chemists ask, as some of them have done, that these gentlemen should exert themselves to restore to the trade the profits which at one time accrued from the sale of proprietaries, they are asking for chivalric, not for commercial, consideration. Moreover, it is right to add that the makers of the articles referred to have not failed to observe the unfriendly tone towards themselves and their businesses which has characterised some of the correspondence on the subject. This has, perhaps, outweighed the claims for gratitude which have been not unfrequently put forward simultaneously. Several manufacturers have sought to secure the favour of the trade for new ventures by undertaking to supply their product to the public only through traders who agree to maintain fair profits. It cannot be said that any conspicuous success from either the manufacturer's or retailer's point of view has been achieved by any of these attempts. The one proprietary article in large demand on which an experiment has been fully tried has been Elliman's Embrocation. The proprietors of this popular preparation have laid down their conditions of sale, and have maintained them pretty rigorously for over eighteen months, and they tell us they are satisfied with the result. It is true that they made an advance in their prices at the same time, and it may be that the effect of this has been an element in promoting their satisfaction. But it appears, from a recent advertisement the firm published in this journal, that they have not been able altogether to prevent leakage. They have done all they could, however, and chemists who wish for more reasonable profits may surely be expected to co-operate with the manufacturers who are disposed to help them.

We understand that Messrs. Burroughs, Wellcome & Co are now following a plan organised by Mr. S. M. Burroughs, by which means they ensure to retailers of their goods a possible profit of at least 20 per cent. In the few cases where they have found cutters supplying their goods at prices below their list quotations they have taken considerable pains, by personal interviews or correspondence, to bring them into line, and they say they have almost invariably found an immediate readiness to agree. In the two or three cases where any difficulty has occurred they have found it possible, by pressure on the wholesale middleman, to secure their will.

Mr. G. J. Seabury, of New York, sends us his "plan," which he is trying to persuade the Proprietary Committee of the National Wholesale Druggists' Association to accept. It is on much the same lines as the other plans which have been proposed and partly worked, and contemplates a tripartite contract to be signed by manufacturers, wholesale dealers, and retail dealers of the usual character. There is to be a "cut-off" list of persons who are found guilty of scalping, and all are to agree to stop his supplies. There is one other condition which retailers are to accept, which has not been introduced here. That is, that "they will not deliver a substitute for any article which is requested, and that is on the contract plan." It is quite reasonable that there should be conditions on all sides; but the American conscience would hardly be equal to the strain of such a stipulation. We can imagine endless disputes arising on the interpretation of this clause. Mr. Seabury says his scheme is neither theoretical nor poetical, but is thoroughly practical. That may

be; but it evidently involves the almost hopelessly impracticable precedent of an almost unanimous consent of all the dealers concerned, the assurance of their invariable integrity, and the abandonment of that enterprise on the part of the scalpers which has hitherto distinguished them.

COMMENTARY.

CHEMISTS AND WINE-DEALING.—The sale of wine as an auxiliary to pharmacy has been hitherto complained of principally by the teetotalers, but if it grows Bung will have a few solemn words to say. The following are some comments from the *Whiskey Trade Review*:—"Apothecaries are one of the first, if not the first, professions, mentioned in Biblical lore, and no doubt some smart chemist has been alive to the fact, though there are those who assert that the wine merchant is mentioned first, but, you know, he is not a professional, only a *dealer*. Still, a wine merchant proper does not deal in *Soft Soap*, and yet a chemist does. However, to be practical, our 'Spiritual' contemporary 'Ridley' has seconded our calling attention to the fact of chemists now retailing tonics from a medicinal point of view. In our issue of September 15, 1890, we had a short article on the subject, and we saw, with profound satisfaction, our elder brother in liquor trade journalism now taking the matter up in the interest of the wine merchant. A correspondent sends Ridley the following, which speaks for itself. Doubtless if any imbibing female (and there are such) can get through a couple of cases of Invalid Champagne in a week she will be called a patient requiring prescribed wine selected by the chemist." The circular referred to is one issued by Stephen Smith & Co., Bow, recommending chemists to deal in "Invalid Port," "Invalid Claret," &c., and quoting for such.

PHOTOGRAPHY has made such rapid strides since the introduction of dry plates, that there seems to be no limit to what may be done in the production of detective cameras. The latest we hear of takes the form of a scarf-pin—that is to say, the lens takes the place of a scarf-pin, and the camera is concealed at the back of the scarf. This camera is oblong, and it carries half-a-dozen plates, which are attached to an endless and movable chain, so that they appear as one at the top behind the pin-lens, one at an equal position at the base, and two at each side. To move the chain, and thus bring a fresh plate into position, all that is necessary is to turn a button at the bottom of the apparatus, which for convenience is put into one of the button-holes of the vest. The shutter is set by a pull at another button, and all that is necessary to expose a plate is to press an india-rubber air-ball, which for convenience and secrecy is carried in the trousers-pocket. The apparatus takes photographs $1\frac{1}{2}$ in. square. Obviously the whole construction of the apparatus is exceedingly favourable to its success as a detective camera, and if it is fitted with a good lens, portraits taken with it can scarcely fail to be good, though small. Definition being certain and good, there is no saying how good the pictures might be made by means of an enlarging apparatus.

THE REDDENING OF CARBOLIC ACID.—The reddening of carbolic acid is a source of considerable trouble to those who deal in the article, and the action which causes it has never been satisfactorily established. Not only the usual acids of commerce are liable to redden, but the same peculiarity is said to exist in the case of the "synthetic" acid placed upon the market a year or two ago. Under these circumstances,

some importance attaches to a paper by E. Fabini, who, in the *Pharmaceutische Post*, claims to have discovered the body which causes carbolic acid to redden. The author ascribes the reddening to the action of copper, which he believes to be present in the carbolic acid even where the original crude material did not contain any. The body is of the nature of a copper derivative of phenol. Fabini calls it diphenyl-copper, $C_6H_5.Cu.C_6H_5$. According to the writer the addition of sulphate of copper to carbolic acid, dissolved in ammonia, forms this body, which, even in a proportion of 1 to 300,000, is capable of imparting a plainly perceptible reddish colour to previously colourless carbolic acid. Fabini's substance is a black, light resinoid body, colourless and tasteless, and reducible to an amorphous powder by rubbing. When heated it evaporates with a yellowish vapour. It sublimes with a peculiar rancid-aromatic odour, forming a rose-coloured solid deposit, which under the microscope appears in the shape of tears, and with concentrated sulphuric acid gives the characteristic blue coloration. Under increased heat the body melts, emanating a vapour which, when ignited, burns with a brilliant flame, but in the ashes of which no copper could be traced. The presence of the substance in carbolic acid is easily proved—even although the acid be not red—by adding to the acid a few drops of ammonia, followed by the same of hydrogen peroxide solution, when an intense carmine-red colour is produced in the course of a few hours, or on gently warming. The *Pharm. Zeitung*, in commenting upon this alleged discovery of Fabini's, points out that, without questioning the accuracy of the results obtained by him, his work is open to the reproach that his mode of procedure does not establish any proof that the substance is actually present in any commercial carbolic acid which has reddened.

CANADIAN NOTES.

TORONTO DRUGGISTS had a detective on trial for a month, to see if any of the score of unqualified men who have drug-shops could be brought to justice; but the detective did nothing.

ASSISTANTS are wanted in Manitoba at present. There are not many chemists in the province; but there is a pharmacy law, and assistants must be certificated, as in Ontario and Quebec.

FEES TOO LARGE.—There is a feeling amongst the licentiates of the Pharmaceutical Association of Quebec that the annual fee of \$10 should be reduced to one-half. This is supposed to be the largest professional fee paid in the Dominion. In Ontario the annual fee paid by pharmacists is only \$4.

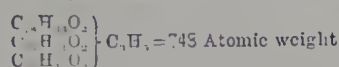
PRICES IN TORONTO.—The druggists of the city continue to keep up the enthusiasm as to remunerative prices, the association having secured a majority of them to adhere to the standard of the price-book. The association has also carried the war into the enemy's camp. All the druggists' proprietary goods handled by the dry-goods stores in the city have been struck off the druggists' lists, and manufacturers have got due warning of the fact.

A LITTLE OPPOSITION is not a bad thing. Since Principal Shuttleworth has disagreed with the president and majority of the Ontario Council he has smartened up wonderfully in the journalistic department. When the full weight of the official organ-ism was upon him his journal was as solemn and stately as it could be; now that he has been compelled to fight for himself he has become as bright as anything, writes with great force and occasional pungency, and is apparently determined to die "game." Meanwhile, there is little indication that the president's party are repenting the step which they have taken in regard to the re-organisation of the College.

COMPOSITION OF BUTTER-FAT.

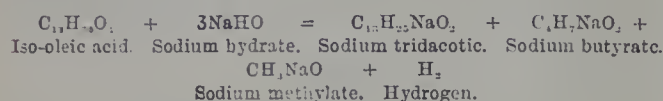
By WILLIAM JOHNSTONE, Ph.D., D.Sc., F.I.C., F.C.S.

FOR some considerable time now the insoluble fatty acids of butter-fat have been taken as varying from 87.5 to 89.5 per cent., and in some extreme cases even to 90.00 per cent. In the month of June of last year two samples of butter came into my hands and my attention was particularly directed towards them on account of the low results obtained from insoluble fatty acids with a corresponding highness in the soluble fatty acids, so I was induced to further examine them in the hope that I should be able to account for the apparent abnormal figures I had obtained—namely, 85.68 and 86.25—as they were undoubtedly genuine, the addition of coconut oil being out of the question. That investigation has resulted in establishing the fact that a butter-fat yielding 85.81 per cent. of insoluble fatty acids is a definite chemical compound, a compound tri-glyceride of the following formula:—



—iso-oleo-palmito-capriate of glycerine.

Up to the present time it was by no means certain that butter-fat really did contain the normal oleic acid or stearine, and my results now confirm the accuracy of that suspicion. A butter-fat containing 85.81 per cent. of insoluble fatty acid is entirely devoid of stearine (?), and what was previously considered to be oleic acid now proves to be iso-oleic acid, $\text{C}_{13}\text{H}_{25}\text{O}_2$ } CH_2 , or butiro-methane-tridacotic acid, which, when saponified with an alkali, is decomposed, and the reaction may be expressed in the following equation:—



Genuine butter-fats yielding insoluble fatty acids above 85.81 per cent. do not contain stearic acid, as has been generally supposed, but nondecanoic acid, the next higher acid of the series $\text{C}_{19}\text{H}_{39}\text{O}_2$, as a second tri-glyceride. Butter-fat then becomes a mixture of iso-oleo-palmito-capriate of glycerine and tri-nondecanoic of glycerine in varying proportions.

The following represents a butter-fat of that description:—

Fatty acids				
$\left. \begin{array}{l} \text{C}_{13}\text{H}_{25}\text{O}_2 \\ \text{C}_{16}\text{H}_{33}\text{O}_2 \\ \text{C}_{18}\text{H}_{35}\text{O}_2 \end{array} \right\} \text{C}_3\text{H}_5$	..	..	62.47	= 63.61
$\left. \begin{array}{l} \text{C}_{13}\text{H}_{25}\text{O}_2 \\ \text{C}_{15}\text{H}_{29}\text{O}_2 \\ \text{C}_{17}\text{H}_{33}\text{O}_2 \end{array} \right\} \text{C}_3\text{H}_5$	..	..	37.53	= 36.00
			100.00	89.61
Fatty acids actually found	..	..	..	89.95

From the above it becomes evident that another acid radicle might replace one or two of nondecanoic acid, and that occurs in the following butter:—

Fatty acids				
$\left. \begin{array}{l} \text{C}_{13}\text{H}_{25}\text{O}_2 \\ \text{C}_{16}\text{H}_{33}\text{O}_2 \\ \text{C}_{18}\text{H}_{35}\text{O}_2 \end{array} \right\} \text{C}_3\text{H}_5$	..	..	53.21	= 45.66
$\left. \begin{array}{l} \text{C}_{13}\text{H}_{25}\text{O}_2 \\ \text{C}_{15}\text{H}_{29}\text{O}_2 \\ \text{C}_{17}\text{H}_{33}\text{O}_2 \end{array} \right\} \text{C}_3\text{H}_5$	..	..	46.79	= 44.50
			100.00	90.16
Fatty acid actually found	..	..	..	90.00

—the radicle of cenanthylic acid replacing one of the nondecanoic acid in the tri-glyceride, and forming the di-nondecanoic-cenanthylic of glycerine. I append the following formula in support of my theory. Thus:—

Theory		Upon saponification yield	Theory		Found
$\text{C}_{13}\text{H}_{25}\text{O}_2$	..		$\text{C}_{13}\text{H}_{25}\text{O}_2$..	
CH_3	..		CH_3 (?)	..	
C_2H_5	..		C_2H_5	..	11.70
$\text{C}_{16}\text{H}_{33}\text{O}_2$	..		$\text{C}_{16}\text{H}_{33}\text{O}_2$..	
$\text{C}_{18}\text{H}_{35}\text{O}_2$	..		$\text{C}_{18}\text{H}_{35}\text{O}_2$..	
$\text{C}_{19}\text{H}_{39}\text{O}_2$	..		$\text{C}_{19}\text{H}_{39}\text{O}_2$..	
$\text{C}_{20}\text{H}_{41}\text{O}_2$	..		$\text{C}_{20}\text{H}_{41}\text{O}_2$..	
C_2H_5	..		C_2H_5	..	12.23
	99.98			112.00	
			Fatty acids	85.81	85.68

The ultimate separation of the insoluble fatty acids is still in hand, and I refrain from stating results until I am able to give a correct process for the separation of the same; but results have been obtained sufficiently near to prove the correctness of the theory. Butter-analysis is therefore now placed upon a satisfactory basis, and if the analyst be fortunate enough to detect stearic acid in a sample of butter, he need have no hesitation in certifying to the addition of animal fat other than butter, or at least to a fat containing stearic acid.

CHEMISTS' ASSISTANTS' ASSOCIATION.

THE meeting at 103 Great Russell Street, W.C., on Thursday January 16, was devoted to short papers. Mr. H. Helbing, F.C.S., read one, which was on

NEW REMEDIES.

Mr. Helbing opened with the statement that the development of a steady interest in synthetical products dated back about five years, and then observed that, as they increased in importance, the manufacture of medicaments had been largely transferred from the hands of those more or less connected with pharmacy to the proprietors of large aniline-dye works. The rôle of pharmacists in relation to these remedies was something more than that of mere dispensers; they had done good work in defining their characters and by raising standards of purity compelling manufacturers to put pure products upon the market. At first synthetical compounds were turned out with comparatively long intervals, and there was opportunity to study them; but, as time went on, they sprang up with such mushroom-like rapidity and thickness that thorough investigation of all was impossible.

Other factors in the prejudice against the class of synthetical remedies were the failure or incomplete success of many, the too-extravagant claims made by their producers, which would not stand examination, and the adoption here and there (as in America) of the patent-medicine style in their introduction.

Passing from generalities to particulars, orexin hydrochloride was first referred to, as recommended by Penzoldt, in doses of 5-8 grains. The unsuitability of pills as a form of administration was pointed out, and the wafer-paper capsule spoken of as best. This, the first synthetical stomachic, was followed by the first local anæsthetic produced by synthesis—viz., "Anæsthesin," which was shown at the Medical Congress in Berlin, and was expected to prove a rival to cocaine; but nothing has been heard of it since.

The base piperazine also found a place, something being said of its supposed identity with Charcot's crystals, and Schreiner's spermine, subsequently doubted, and of its power of dissolving twelve times as much uric acid as lithium carbonate. The hydrochlorate of piperazine is believed to possess stimulating properties similar to those ascribed to spermine. Benzosol, or benzoyl-guaiacol, the substitute for guaiacol (the dose of which is 4 grains, gradually increasing to 12 grains), salipyrin, euphorin, paracresolate of sodium, and cresalols were also brought under notice.

Allusion was made to antipyrin prepared by a new method. Specimens of the product were shown at the Congress in Berlin, but it was not put on the market, probably because the process did not sufficiently differ from that of the patentees. More recently, however, another quite different process had been patented, the product of which appeared to be identical with antipyrin. At the end of the paper the author added a full and useful reference list of more than 70 new remedies, giving their application and doses; and he showed two specimens of ointments containing white and red precipitates, and made with lanoline ointment as a base. These were still in perfect condition, though made fifteen months before.

In a note on the

INFLUENCE OF LIGHT ON A MIXTURE OF CALOMEL AND IODOFORM.

Mr. G. Roe called attention to the fact that a mixture of equal parts of the two above-named substances and starch, after a few days' exposure to light, showed brown spots under the glass, which changed gradually to scarlet. Ex-

periments with mixture of iodoform with various mercurials elicited the curious fact that no change took place with mercuric chloride in seven days, while it was effected in twenty-four hours with calomel.

Mr. Davies communicated some particulars of the mite found in linseed, which he considered peculiar to that substance, and so dubbed

ACARUS LINI.

This acarus resembled *A. farini* and *A. sacchari*, but differed in the size of the pinnate setae and other minor particulars. Mr. Davies says he was induced by this discovery to commence a special study of the acari of drugs, but so much incredulity was expressed by the members as to the mite of linseed being a distinct species that the author would probably be wise to make a more careful study of this particular acarus under other conditions of life before proceeding further.

Under the comprehensive title of

LABORATORY NOTES,

the President (Mr. A. C. Stark), gave the results of the examination of a few printed tests of identity. The two he found useful were for cocaine and resorcin. The former involved the production of a distinctive odour described as resembling peppermint, but really reminding of wintergreen oil when the alkaloid is treated in a watch-glass with a few drops of nitric acid evaporated to dryness and moistened with alcoholic potash. Resorcin in solution gave with solution of chlorinated soda a distinct violet colour which faded to red and yellow.

Mr. Stark also showed some gall stones, and the cholesterol (extracted by boiling with methylated spirit, filtering and crystallising) and bilirubin obtained from them.

Mr. F. McDiarmid brought the papers to a close with a note on

SOME GELATINE BASES,

in which he reviewed the history of zinc-gelatin as recommended primarily by Unna in the treatment of skin diseases, ulcers, &c. (see "Art of Dispensing," p. 122, and THE CHEMIST AND DRUGGIST, preceding vol., p. 697), gave the formula for it, and showed specimens containing ichthyol, ext. cannab. ind., and other medicaments.

An interesting discussion followed, in which the President, Messrs. Helbing, Smith, Rogers, and Williams took part. An additional statement of interest to the dispenser was that the gelatine could be kept well for years under spirit.

Gazette.

PARTNERSHIPS DISSOLVED.

Barrett, H., & Cryer, T., under the style of H. Barrett & Co., Paragon Chemical Works, Castleton, near Manchester.

Brookes & Mackenzie, Much Wenlock, surgeons and medical practitioners.

Edmonds, G. J., & Kidson, W., under the style of Edmonds & Co. Ramsgate, mineral-water manufacturers.

Leech, H. P., & Son, Woolpit, surgeons and apothecaries.

Pope & Brown, Tring, surgeons and general medical practitioners.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Von Weissenfeld, George Ferdinand, Great Portland Street, W., late of Paris, and Glebe Terrace, Church Street, N., analyst.

ADJUDICATIONS.

Von Weissenfeld, George Ferdinand, Great Portland Street, W., late of Paris, and Glebe Terrace, Church Street, N., analyst.

Whitmarsh, John Lloyd, Thurloe Place, South Kensington, late of Fulham Road and Marlborough Road, doctor of medicine.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Hunt, James John, trading as Hunt, Son & Co., Norwich and Great Yarmouth, mineral-water manufacturer, &c.; discharge suspended for twelve months.

Legal Reports.

METHYLATED FRIAR'S BALSAM.

At the Shire Hall, Nottingham, on January 14, William Henry Wood, chemist, of Front Street, Arnold, was charged with selling Friar's balsam, a medicine capable of use internally, in the preparation of which methylated spirit had been used, contrary to the provision of the Act. Mr. E. J. Counsell, supervisor of Inland Revenue, appeared to prosecute, and Mr. Whittingham defended. Mr. Counsell said Mr. Wood had rendered himself liable to a fine of 100*l.* by what he had done. On August 27, 1890, an officer of the Department stationed at Arnold visited, amongst others, the shop of Mr. Wood, and procured from him 2 oz. of Friar's balsam, which was sent to London to be analysed. It was found to have been prepared solely with methylated spirit. Evidence was called to support Mr. Counsell's statement, including that of Mr. James Cameron, F.I.C., of the Somerset House Laboratory. Mr. Whittingham admitted on behalf of his client that the Friar's balsam was made of methylated spirit. Mr. Wood did not sell more than two pints of the compound in a year, and that only for external application. The Act was rather indefinite, and Mr. Wood had certainly no intention of defrauding the Revenue. He had been in business at Arnold for forty years, and never previously had he been charged with any offence. He (Mr. Whittingham) took it that the case had been got up more as a caution than with the intention of having inflicted upon Mr. Wood a heavy penalty. Mr. Counsell intimated that he did not wish to press the case. The Magistrates said that they had no option but to convict. It appeared to be the first offence in a long period of years for which the defendant had been brought before the bench, and they would therefore only impose a nominal fine, which, including the costs, would amount to 1*l.* 1*s.*

ORRIDGE v. TOONE.

THIS case, which was reported in THE CHEMIST AND DRUGGIST last month, and about which some correspondence has appeared in these columns, again came before Mr. Commissioner Kerr on Wednesday, in the City of London Court.

Mr. W. Greig, the defendant's solicitor, said it was an application made at his instance to review the taxation of costs by the registrar. The action was brought to recover 33*l.* 2*s.* Of that sum 5*l.* 12*s.* was for advertising the defendant's business of a chemist, and 27*l.* 10*s.* for commission earned by the sale of the business. The court found for the defendant, but he had paid the 5*l.* 12*s.*, and the proportionate costs into court, with a denial of liability. When the trial took place the 5*l.* 12*s.* was abandoned, which the plaintiff was entitled to retain. The judgment for the defendant was as to the remainder of the claim with costs, and the defendant's costs were brought in as from the commencement. The registrar, before whom the question of costs went, held that he could not allow costs prior to the time of the payment into court. He (Mr. Greig) contended that this was contrary to the Act of Parliament. It made a great deal of difference to the defendant in the costs, and it was only just and right that, having won, he should not be put to a lot of costs.

Mr. Commissioner Kerr: What is just and right is one thing; what is an Act of Parliament is another. When you pay money into court and deny your liability, it is a thing you may do in form, but it is absurd on the face of it. You say, "Here is 5*l.* 12*s.*, but I don't owe you anything." Of course it was hard on the defendant to be a lot of money out of pocket after practically succeeding in an action. But that is the law. The Master of the Rolls has this week denounced the creation of costs. I have been doing it for thirty years, and one of the judges of the High Court seems to have started it at last. It is high time they all did so.

Mr. Greig complained that Mrs. Toone's costs, at 5*s.* a day, were very inadequate, in addition to the railway fare. The wife of a chemist was worth more than 5*s.* a day.

Mr. Commissioner Kerr: Is the wife of a chemist more valuable than any other man's wife—a barrister's wife, for example?

Mr. Greig presumed the expenses allowed would be higher for a chemist's wife than a person of a lower grade in life.

Mr. Commissioner Kerr said that was not so. He dismissed the application, overruling the objections raised, with costs.

A DISPUTE ABOUT WEIGHT.

At the Registrar's Court of the Liverpool County Court, on Wednesday, before Mr. Bellringer, Alfred Hopps & Sons, oil merchants, 26 Old Hall Street, Liverpool, brought an action against Humphries & Co., wholesale druggists, Bradford, to recover 3*l.* 19*s.* 8*d.* for goods sold and delivered. Mr. Jones appeared for the plaintiffs, and Mr. Humphreys conducted his own case. Defendant had paid the sum of 2*l.* 14*s.* 8*d.* into court. The case for the plaintiffs was to the effect that they had supplied the defendant with a box of Spanish juice or liquorice at the order of the latter. The weight of the case and contents, the plaintiffs declared, was 1 cwt. 1 qr. 5 lbs. gross; tare was allowed of 23 lbs., and 3 lbs. for leaves, leaving the weight of liquorice 1 cwt. 7 lbs., the value being 3*l.* 19*s.* 8*d.* The case was given to the Midland Railway Company for delivery, and forwarded to the defendant in due course. Defendant, on weighing it, found it 37½ lbs. short weight. He at once sent a telegram to the plaintiffs' office about the short weight, and also to the Midland Railway Company. Defendant next day sent the following letter to the plaintiffs:—"We beg to enclose copy of telegram *re* short weight in juice. The deficiency is large, and we shall not pay for what we have not received, nor do we suppose you will ask us. You can send a man or appoint somebody in Bradford to see it weighed. Your kind attention will oblige." The plaintiffs replied, maintaining the accuracy of the weight alleged, and declaring that if defendant's statement were correct, the liquorice must have been lost or pilfered during transit. It was, however, for the consignee to claim from the railway company. Several letters passed between the parties, and ultimately the defendant sent a cheque for 2*l.* 14*s.* 8*d.* which the plaintiffs returned, and insisted on an immediate payment of 3*l.* 19*s.* 8*d.* The defendant refused to pay this, and the action was brought.

Two witnesses were called for the plaintiffs, who swore that the weight charged for on the invoice was correct.

The defendant swore that the weight received was as follows:—81¾ lbs. of juice, 6 lbs. of leaves, and 25 lbs. of wood.

A railway checker, Mr. Bishop, who was called for the defendant, deposed that the case weighed only 1 cwt. when delivered to the railway company.

Defendant said he had five witnesses in Bradford who could prove, if the case was adjourned, that the weight was what he stated.

Mr. Jones said he did not desire the case to be adjourned, or the witnesses alluded to by the defendant called.

In reply to Mr. Jones, defendant said the goods came before the invoice, and that he signed the sheet or railway bill which stated that they weighed 1 cwt. He had never admitted that any of the contents of the box was stolen in transit.

The Registrar said he was quite satisfied that the goods as delivered in Bradford were in the same condition as received by the Midland Railway Company. He was of opinion that the defendant had tendered payment for what goods he received. He believed plaintiffs had made a mistake in the weight. He was quite satisfied with Mr. Humphries' evidence, and that he was only bound to pay for what goods he had received. Therefore he was of opinion that the amount paid into court for the value of goods received was sufficient, and he would give a verdict for the plaintiffs for this amount. On the plaintiffs' claim for 1*l.* 5*s.*, the difference between the 2*l.* 14*s.* 8*d.* and 3*l.* 19*s.* 8*d.*, there would be a verdict for the defendant.

The defendant said he was entitled to 1*l.* 1*s.* as expenses. He was a professional chemist by examination.

Mr. Jones objected to the defendant being paid costs.

Defendant said his time was occupied in coming there. Although he was not a lawyer he thought his time should be paid for.

The Registrar allowed the defendant 1*l.* 1*s.*, and said he was entitled to it. Defendant had conducted his case with great ability.

BANKRUPTCY REPORTS.

Re CHARLES A. COBB, Wool Exchange, Coleman Street, E.C., Indian Export Merchant.

UNDER the failure of this debtor, against whose estate a receiving order was made last November, accounts have now been issued from the court showing gross liabilities 5,273*l.* 13*s.* 10*d.*, of which 4,182*l.* 2*s.* 5*d.* are expected to rank, against assets valued at 1,278*l.* 15*s.* 1*d.*, and consisting chiefly of book-debts owing to the estate. The debtor states that he formerly acted as agent for a firm of merchants in Bombay, but that since November, 1889, he had traded on his own account, having exported goods to India entirely to the order of the above-mentioned firm, who, he alleges, are indebted to him in the sum of 1,249*l.* 7*s.* 3*d.* (book-debts). When the debtor commenced business in November, 1889, he had a deficiency of 1,091*l.*, and he attributes his present deficiency to losses by bad debts (608*l.*), to losses by speculations on the Stock Exchange (280*l.*), to legal expenses (204*l.*), and to the expenses generally having been in excess of the profits. At the first meeting of creditors, held on December 23, resolutions were passed to wind up the estate in bankruptcy, with Mr. E. H. Collins, 19a Coleman Street, E.C., acting as trustee. The public examination of the debtor was appointed for Wednesday last, but the case not having been reached at the rising of the Court, the learned Registrar ordered an adjournment of a few weeks.

Re JULIUS BLUMENTHAL, 2 Whittington Avenue, E.C., Merchant.

IN our last issue we gave a report of the first meeting of creditors in this case, the meeting standing adjourned until January 27. The following are amongst the creditors:—Messrs. Corrie, Moon & Co., 37 Mincing Lane, 315*l.* 10*s.* 1*d.*; Messrs. Dalton & Young, Market Buildings, Mincing Lane, 779*l.* 19*s.* 7*d.*; Messrs. H. J. French & Co., 7 Hamsell Street, 22*l.* 18*s.* 9*d.*; Messrs. S. Figgis & Co., 3 Mincing Lane, 433*l.* 13*s.* 11*d.*; Messrs. Hale & Son, 10 Fenchurch Avenue, 992*l.* 4*s.* 1*d.*; Mr. Wm. Lewis, 5 Well Street, Jewin Street, 24*l.* 10*s.*; executors of the late Mr. Marcus, care of Mr. J. Politzer, 35 Queen Street, 3,000*l.*; Messrs. W. Nightingale & Co., 72 Old Street, 66*l.* 3*s.* 8*d.*; Messrs. Nelke, Phillips & Bendia, 5 Throgmorton Avenue, 477*l.* 7*s.* 8*d.*; Mr. John Sugden, 13 Finsbury Square, 202*l.* 8*s.* 4*d.* Fully secured: Messrs. Lewis & Peat, 6 Mincing Lane, 1,005*l.* 11*s.* 9*d.*; Messrs. A. and W. Vesbitt, 10 Fenchurch Avenue, 213*l.* 6*s.* 9*d.*; Partly secured: Mr. L. W. F. Behrens, 71 Eastcheap, 1,263*l.* 3*s.* 2*d.*; Mr. Carl Meyer, New Court, St. Swithin's Lane, 3,029*l.* 6*s.* 10*d.*; executors of Mr. Marcus, 16 Tokenhouse Yard, 951*l.* 3*s.* 11*d.*; Messrs. Hardy, Nathan, & Sons, 3A, Tokenhouse Buildings, 1,740*l.* 6*s.* 11*d.*; Mr. J. Salaman, 45 Monkwell Street, 615*l.* 3*s.* 11*d.* Preferential: Messrs. M. and W. Salaman, 45 Monkwell Street, 35*l.*

Re ELIZABETH BROWN, Warwick, Chemist, &c.

At the Coventry County Court on Tuesday, Sir Richard Harrington gave his decision upon an application made to him at the Warwick Court. Mrs. Brown had, as executrix of her husband, carried on the business of chemist, in which her husband had been engaged at the time of his death, and she became bankrupt. At his death her husband was also insolvent, and this was an application to consolidate the two estates; but after reviewing the arguments advanced on behalf of the Official Receiver, his honour decided he had no authority to make the order for consolidation.

Re EDWARD WHITE, 3 South Bank Villas, Lower Weston, 19 Kingsmead Square, Bath, and 22 Moorland Road, Twerton, Chemist and Druggist.

A MEETING of the creditors of this debtor was held at Bristol on Wednesday, before Mr. E. G. Clarke, the Official Receiver. The summary of the debtor's statement of affairs gave the liabilities to unsecured creditors at 864*l.* 10*s.* 4*d.* The assets were estimated at 232*l.* 12*s.* 3*d.*, showing a deficiency of 631*l.* 18*s.* 1*d.* The causes of failure alleged by

the debtor were not being able to give his whole time to the business in consequence of his medical studios, through dishonest assistants, and improvements on property. The Official Receiver's observations were to the effect that the debtor commenced business three years ago, with a borrowed capital of 300*l.*, since increased to 550*l.*, and this now ranked for dividend with the other creditors. The other liabilities were for comparatively small amounts, the largest being for 25*l.* The books kept were a day-book, cash-book, and ledger, but they did not contain the full account of the receipts and payments, and the debtor did not appear to have taken steps at any time to ascertain his position. In the deficiency account 160*l.* was set out as loss on amount paid for business at 19 Kingsmead Square, Bath, and 120*l.* as spent in repairs to that property. The Official Receiver further reported that the debtor had lodged with him a proposal to pay a composition at the rate of 7*s.* 6*d.* in the pound, Mr. W. H. Bowles, 41 Broad Street, Bath, accountant, to be the trustee for the distribution of the composition at the expense of the debtor, and the payment of the composition to be secured by the amount being paid to the trustee within twenty-one days of the court approving of the composition. The Officer Receiver added that the proposal appeared to be a reasonable one, and such as would be for the interests of the creditors to accept. An independent valuation taken at his instance confirmed this view. The creditors present resolved to accept the composition offered, subject to the approval of the court.

EXTRACT FROM DEEDS OF ARRANGEMENTS.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1837. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

onsarrat, Herbert Frederiek, 17 Mincing Lane, E.C., and Lindley House, Blackheath, Colonial Broker. Dated, January 13; filed, January 19; unsecured liabilities, 14,386*l.* 8*s.* 2*d.*; estimated net assets 744*l.* 6*s.* Deed of release in consideration of the payment to creditors of a composition of 1*s.* in the pound.

	£	s.	d.
Afriat, Aaron, London.. .. .	235	6	1
Afriat, Judah, London.. .. .	952	5	2
Bauer, M. L., & Co., London	29	9	4
Bensusan, E. M., London	246	1	1
Bianie, W., & Co., London	347	12	3
Brown & Elmslie, London	23	3	5
Buckler, H., London	1,300	0	0
Carver Bros. & Co., Manchester ..	221	19	10
Cornwallis, Brooks & Co., London ..	120	0	0
Dalton & Young, London	1,143	13	10
Figgis, S., & Co., London	40	3	0
Foxall & Peacock, London	451	1	1
Hart, H. B. & C. L., London	222	13	0
Johnson, Rolls & Co., London	294	2	0
Kennewell, W. & A., London	50	0	0
Laing, Son & Co., London	30	0	0
Lewis & Peat, London.. .. .	1,302	6	0
Lestler, J. S., London	345	15	2
London and St. Katherine Docks, London..	159	12	2
Marshall & French, London	531	7	0
May, Malcolm & Co., London	984	18	6
Netmann & Co., London	128	6	8
Petrocchino Bros., London	207	2	0
Ralli Bros., London	5,178	6	6
Renner, H., London	27	12	1
Sargant & Son, London	28	2	7
Stanshery & Co., London	15	0	0
Van der Lely & Simpson, London ..	30	0	0
Walker, Gum & Co., London	55	0	0
White, Blum & McEwen, London.. ..	122	10	0

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Laack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," January 7, 1891.

Oblong design in form of picture frame, with wording; for disinfectant and deoderiser By R. H. Neugebauer, Frankenstrasse, Hamburg, and A. Myall, 21 Cockspur Street, S.W. 150,896.

"WINE'S BRONCHIAL HEALER" and monogram; for a medicine for human use. By J. Hemmons, trading as J. Wine, Temple Street, Bristol. 150,698.

Picture of two cherubs, one holding banner bearing device, "Relief from pain"; for an embrocation. By R. Woollatt, 20 Fore Street, Taunton. 150,743.

"THE CONTINUOUS FILTER" and oval-shaped design; for a filtering machine. By the Continuous Filter Company (Limited), 110 Cannon Street, E.C. 151,481.

"MRS. S. A. ALLEN'S HAIR RESTORE," and other wording, on oblong label: for a preparation for the hair. By S. R. Van Duzer, 114 Southampton Row, London. 150,836.

"VINOIA": for perfumery and toilet articles generally. By Blondeau & Cie., Ryland Road, N.W. 152,020.

From the "*Trade Marks Journal*," January 14, 1891.

"THE MINER'S PILL," and sketch of miner with pick: for pills. By W. H. Johnson, trading as Johnson & Co., 143 Victoria Road, Headingley, Leeds. 99,764.

"LANGSHAW ROWLAND'S MARSHMALLOWS," and sketch of marshmallow plant; for a medicine. By L. Rowland, High Street, Wrexham. 150,695.

"CARLSBAD POWDER," and sketch of the "Deerleap," Carlsbad; for a mineral salt preparation. By S. Kutnow & Co., 14 Buckland Crescent.

"J. BOWN & CO., STROUD," as signature; for mineral and aerated waters. By J. Bown & Co., Lansdown, Stroud. 152,081.

From the "*Trade Marks Journal*," January 21, 1891.

"CALVERT'S," and other wording, on oblong label; for chemical substances used for veterinary, sanitary, &c., purposes. By F. C. Calvert & Co., Bradford, Manchester. 99,519.

"EDWD. J. SMITH," as signature; for a teething and cooling powder for children. By E. J. Smith, trading as Turner & Co., 111 Keeton's Road, Bermondsey, S.E. 150,815.

"LACINATIRUP," and other wording, on triangular label: for medicines for human use. By W. S. Blinkhorn, 29 The Canal, Salisbury, Wilts. 152,200.

Sketch of large bird; for mineral and aerated waters. By The Gordon Hotels (Limited), 25 Cockspur Street, London. 152,049.

"THE COURT HAIR DESTROYER;" for a toilet preparation. By Matilda Lane, trading as John Leon, 23 Maida Hill West, W. 90,339.

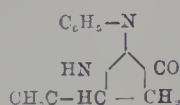
Representation of two pears and signature on circular design; for perfumery and toilet articles. By A. and F. Pears, 71-75 New Oxford Street, London. 151,457.

"ELAOMETH;" for hair-washes, toilet preparations, &c. By E. J. Beeré, Adelphi Hotel, Liverpool. 151,645.

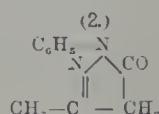
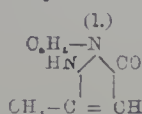
A CURIOUS CASE OF MORPHIOMANIA is reported from the States. A man of 35 had from his boyhood snuffed morphia solution until it became a perfect mania with him. He began to use it for headache, and by the time his case came under a doctor's notice he was snuffing 60 grains of morphia per day, had lost weight and all sexual strength.

NEW ANTIPYRIN PATENT.

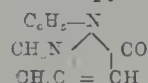
AT the Chemists' Assistants' Association last Thursday Mr. Helbing mentioned that two fresh patents have been applied for in Germany for the manufacture of antipyrin. The more recent of these comes from Messrs. Böhringer & Sons, and it consists specifically of acting upon phenylhydrazin with beta-bromobutyric ether, or similar halogen derivative, whereby methylphenylpyrazin is produced, and which, by oxidation and subsequent methylation, yields antipyrin, or phenyldimethylpyrazin. In Knorr's process acetic ether is used for the preliminary action upon phenylhydrazin. In Böhringer's new method equivalents of beta-bromobutyric or beta-chlorobutyric ether and phenylhydrazin in a weak alkaline solution are heated together on a water-bath until the odour of the ether has practically disappeared; then the mixture is treated with cold water in order to precipitate the methylphenylpyrazin. This body has the following constitution:—



Practically the same thing takes place in Knorr's method, but in that case the reacting elements combine, and it is only necessary to remove from the product a molecule of ethyl alcohol in order to produce methylphenylpyrazin. This takes place in the first stage of the process. In Böhringer's method a hydrogen atom is removed in the second stage, and this is done by dissolving the first-stage product in benzol, and shaking-up with mercuric oxide. There then results dehydromethylphenylpyrazin, whose constitution is represented by the first formula:—



The second formula is that assigned to Knorr's phenylmethylpyrazolon. In the final stage of the new process the product of the second stage is treated (as in Knorr's method) with a solution of methyl iodide in methyl alcohol by heating for some time at a temperature of 100° C, and dimethylphenylpyrazin, or antipyrin, results, viz.:—



This, on recrystallisation, is obtained with a melting-point of 113° C., which is the German standard, and gives the isonitrosoantipyrin reaction with an acid solution of sodium nitrite.

It will be observed that the term "pyrazin" is used throughout in this note instead of "pyrazolon." This obviously is a misapplication of the term, pyrazins being a class of bodies entirely different from pyrazolons to which class antipyrin belongs. The former word is used in the German papers from which we reproduce this note.

Trade Notes.

SEQUAH (LIMITED) have removed their offices from 10 Old Jewry Chambers to 44 Farringdon Street.

THE AMERICAN TOILET COMPANY has removed to 158 Strand, W.C., from 188 Piccadilly. This company holds the agency for Dr. Sheffield's crème dentifrice and elixir balm.

THE SANITAS COMPANY (LIMITED) have lately issued a little pocket almanack and diary giving fixtures of fairs and race-meetings, and a pamphlet on "Sanitas Oil considered in its relation to the Pine Treatment of Bronchitis, &c."

MESSRS. HAMILTON & Co. of the Sovereign Chemical Works, Wandsworth, have removed their offices from 17 and 19 High Street to 98 High Street, the building known as St. George's Hall, where they get more room for the efficient conduct of their business.

THE POST-OFFICE has stopped the use by Messrs. Oscar Sutton & Co. and their agents of envelopes in the post bearing on the left-hand corner an advertisement resembling a stamp. This is an infringement of the Post-office Protection Act, 1884. The Post-office has allowed a modification of the advertisement.

MESSRS. CRESSWELL BROTHERS, of 1 and 2 Red Lion Square, sponge merchants, announce that they have bought the business of Messrs. R. Cresswell & Co., of 32 Red Lion Square, and have combined it with their own. There is now therefore only one firm of that name in the sponge trade. The firm claim to have taken 36 per cent. of the whole of the sponge imports as last declared.

IVORINE is worthy of note for the attractive style in which it is put up. It is in dull, gold boxes, packed in a cardboard-box. The preparation is a hard ointment, stated to contain the oleaginous extract from the leaves of the Ivor shrub imported from the Pacific Islands, combined with wool fat. Miss Terry, Miss Fortescue, Miss Florence St. John, and many other popular favourites write warmly about it. The makers are Messrs. Morse & Co., 54 Southgate Street, Bath.

Obituary.

BANKS.—The death is announced, at the age of 57 years, of Dr. Banks, of Station Road, Hadfield. Deceased, a native of Warrington, was formerly in business as a chemist in John Dalton Street, Manchester. About twenty-one years ago he commenced practising medicine in Mottram, and afterwards established himself as a medical practitioner at Hadfield.

MOULD.—On January 11, Mr. Samuel Mould, chemist and druggist, Grange Park, Thornton Heath. Aged 69.

RICHARDS.—We regret to announce the death from a sharp attack of pleurisy, of Mr. Edwin Richards, F.I.C., one of the secretaries of the Chemists' Assistants' Association, who was but recently appointed town traveller to Messrs. Hopkin & Williams. This announcement will come as a great shock to many metropolitan pharmacists and their assistants. There were few of the younger men in the craft who were so much respected as Mr. Richards, who was a hard-working fellow, possessed of a great deal of natural ability, and exceedingly painstaking in research. Mr. Richards was with Hopkin & Williams for fourteen years, much of that time being spent in the laboratory under the late John Williams. Mr. Richards studied at the Finsbury Technical Institute, taking there the course requisite for the Institute of Chemistry examination. Latterly he has devoted a great deal of his spare time to the Chemists' Assistants' Association, but he also gave considerable attention to original work, and we fear that his zeal had undermined a constitution by no means too robust. Mr. Richards' investigation on the chemistry of aconites and aconitines, the results of which we published two years ago, was typical of the man. He followed up every little detail, both chemically and microscopically, which had bearing upon his case, and so convinced was he of the possibility of unravelling all that there is to unravel about aconite that he, along with his coadjutor, continued the work until his death. We are in a position to say—and it is right for the sake of Mr. Richards' memory that it should be stated—that his important investigation was ready for publication. To those who have known Mr. Richards this circumstance is of pathetic interest. By his own merit and dominant perseverance, unaided by personal influence, he brought himself to the front, and when general recognition of his worth was within reach, death has taken him away.

As an expression of their deep regret at the loss of their colleague, the Chemists' Assistants' Association adjourned their intended discussion on Thursday evening.

SERGEANT.—Mr. Thomas W. Sergeant, chemist and druggist, formerly dispenser at the Royal Infirmary and apothecary to the Lock Hospital, Liverpool, died somewhat suddenly at his residence on Saturday last. He purchased a retail business about five years ago in West Derby Road, and has since that time carried it on successfully.

Practical Notes and Formulae

CAMPHO-PHENIQUE

is a somewhat popular disinfectant in the United States. According to Dr. J. Robinson (*New Idea*), it was made by him long before the article was patented, his formula being:—

	Oz.
Purified carbolic acid	1
Camphor	1

Mix and make a solution.

TINCTURA HÆMOSTYPTICA.

PROFESSOR HEINRICH FRITSCH, of Breslau, gives (*Therap. Monatsh.*) the following as a reliable preparation:—

Powdered ergot	10 parts
Rectified spirit	20 "
Sulphuric acid	2 "
Boiling water	500 "

Infuse the ergot in the acid and water for two hours, evaporate to 182 parts, add the spirit, and 30 parts of syrup of cinnamon. The dose of this is an ounce three times a day.

THE DETECTION OF IODINE.

MR. W. H. SEAMON states (*Journ. Anal. Chem.*) that the reaction of potassium iodide with the platinic salts furnishes a valuable test for the soluble iodides. The manner of making the tests is to add to the solution in a test-tube 1 or 2 drops of solution of platinic chloride. As the platinic chloride mixes with the liquid, a beautiful red coloration is produced, due to formation of platinic iodide. If much iodide be present the solution becomes black, with subsidence of a brownish precipitate. It is, therefore, best to have the solution neutral or acid with sulphuric acid. The reaction is plainly visible if $\frac{1}{13000}$ part of iodine be present, and is readily seen, though faint, with $\frac{1}{65785}$ part of iodine.

PREPARATION OF SYRUP OF TOLU.

M. BARNOUVIN (*Répert. de Phar. and Amer. J. Phar.*), after a good deal of experimentation, concludes that the benzine odour of this syrup arises either from the use of too much heat in the preparation of the syrup, or from the use of an indifferent quality of tolu. With too much heat, as in using an open fire instead of the water-bath, a certain amount of dry distillation goes on which produces a small quantity of toluene; hence the benzinic odour. Balsam of tolu of inferior quality which is poor in cinnamic acid may undergo this transformation. Such a balsam, under the influence of heat, is transformed into a soft, resinous mass well calculated to retain caloric. This is the more exposed to the modification cited, from the fact that, being poor in aromatic principles, long exposure to heat is necessary for preparation.

TINCTURES OF HENBANE AND BELLADONNA.

MR. H. A. THAYER, Ph.C., of the University of Michigan, reports to the *Pharmaceutical Era* the results of his examination of tinctures of belladonna and henbane obtained from Michigan pharmacies. Both tinctures varied much in alkaloidal value and also in specific gravity. They are made with diluted alcohol, and both represent 1 of the leaf in 66 of tincture. The belladonna ought therefore to be about three times stronger than the B.P. tincture, and the henbane a little stronger. The average amount of alkaloids extracted from twelve samples of tincture of belladonna was 022 per cent., this by Dunstan and Ransom's process; the highest being 0335, and the lowest 0093. Mr. F. W. Fletcher puts down 028 per cent. as the amount obtainable from British tincture of belladonna, and 04 is his percentage for tincture of henbane, but Mr. Thayer only got an average of 0118 per cent. from twelve samples of American tinctures, 0206 being the highest and 0056 the lowest. Mr. E. H. Farr's figures are 026 per cent. for belladonna, and 02 per cent. for henbane tinctures. Evidently, therefore, the Michigan ones are poor indeed.

BLEACHING BEESWAX, AND COMPOSITION OF WHITE WAX.

IN this article the authors, A. and P. Buisine, state that wax is most frequently bleached by simple exposure in thin shavings to air and light, especially to the direct rays of the sun. In the dark it is not decolorised even in a current of strongly ozonised oxygen. In air-bleaching pure yellow waxes lose only from 1 to 2 per cent. of their weight; the melting-point remains sensibly the same; there are formed mere traces of acids soluble in water; the free and combined acids remain within the limits fixed for yellow waxes. The quantity of carbides is decreased, and the "iodine figure" is lowered about by one-half. In practice from 3 to 5 per cent. of tallow is always added to yellow wax before bleaching. The chief reason for this addition is that pure air-bleached wax is too brittle. With the addition of tallow the bleaching is more rapid, and the finished product is whiter. The oleic acid contained in the tallow assists in the combustion of the colouring matters. Oil of turpentine added in small quantity acts in the same manner as tallow. Wax may also be bleached by being kept in fusion in presence of animal charcoal, which retains all the colouring. On filtration the wax is obtained quite colourless. Certain oxidising agents, such as permanganates and dichromates in acid solutions and oxygenated water, give good results. Reducing agents, such as sulphurous acid, sulphites, hydrosulphites, &c., do not act upon the colouring matter of waxes. Chlorine removes the colour, but it is absorbed in equivalent proportions; the constitution of the wax is profoundly modified so as to render it unfit for use. The iodine figure of a pure yellow wax having been found 11.23, became after bleaching with animal charcoal 11.36; on bleaching with permanganate 1.08, and after treatment with dichromate 7.94, and in another sample 1.08.—*Bul. Soc. Chimiq. Paris, and Chem. News.*

ENGLISH AND GERMAN DIGITALIS LEAVES.

AT this year's meeting of the Virginia Pharmaceutical Association, Mr. C. B. Fleet read a paper on "Digitalis," in the course of which he said that digitalis leaves reach America from two sources—Germany and England. Why the leaves of the second year's growth from American plants should not be used he did not know—perhaps because nobody has ever thought it worth while to try them. From Germany they are imported in bales of about 200 lbs. weight. From England they are usually brought packed in 1-lb. bottles, though occasionally, on a special order, imported in bales. The only difference he could see between the German and English leaves in appearance is that the German seem to have rather more of leaf stems and small branches in them. He had found several bottles of English leaves which had been packed damp, and were consequently undergoing destructive fermentation. At another time he found, on opening and garbling a bottle of the English, the following articles:—Five greengage seeds, several small pieces of hemp rope, two or three small nails, four tacks, sundry scraps of wire, and perhaps one or two other small articles. So that "honours are easy," so far as careless packing is concerned. Several physicians who use infusion of digitalis in their practice told him that they could rely only on the infusion prepared at a certain drug-store. Inquiry being made as to where they had obtained their infusion brought out the fact that the druggist to whom they gave the preference claimed no special skill in making the preparation, but invariably used English leaves, and followed the official formula, while the others made theirs from the fluid extract prepared from German leaves. Mr. Fleet cited other cases, which also pointed to the superiority of English leaves, but they are not enough to warrant this conclusion positively, because, first, the German leaves used in these cases may have been old and the English fresh; or, second, what were supposed to be English leaves may have been really German repacked in England, as is often done. Nevertheless, Mr. Fleet thought the facts warrant dispensers in using the English leaves. He also suggested that when powdered digitalis is prescribed it is always best to powder the leaves at the time, for the simple reason that we can never tell how long the powder has been kept, nor how it has been kept, before we get it.

Medical Gleanings.

THE POISONOUS NATURE OF KOCH'S FLU

THE *Lancet* does not appear to be enamoured of Koch's fluid, and appeals to the German Government to allow Koch to give more particulars about his investigation. Regarding the remedy itself, it is said that which is obvious is the very powerful toxic effect produced by the material, as seen not only in the high temperatures produced, but in the symptoms of cardiac enfeeblement—the rapid pulse, collapse, cyanosis, and other alarming symptoms—which have unfortunately in some cases been fatal, and which prove how great is the need for caution in the use of the agent and for vigilance in the observation of its effects. These grave symptoms may arise in the absence of any notable temperature reaction, and apart from any very severe local reaction. No doubt their gravity is increased in the anemic and debilitated subjects of certain forms of tubercular disease. All other symptoms of the period of reaction sink into insignificance beside these, which show that the fluid is more or less a direct cardiac poison. Our contemporary believes that, although for some of the anomalous symptoms which may characterise the reaction an explanation may be found in the local disturbance excited around an unsuspected tubercular focus, yet for others—and these the most serious—it is the general toxic effect of the remedy itself that is responsible. It is too soon to appraise the value of the treatment, but it would be unwarrantable to reject it altogether.—According to Professor Kochen, of Vienna, the toxic effect of the lymph is marked in some cases by the presence of peptones in the urine of the patients who have been injected.

MERCURIC CHLORIDE IN DIPHTHERIA.

DR. F. A. COWARD, of Huddersfield, reports to the *British Medical Journal* that since he commenced to use liq. hydrarg. perchlor. in the treatment of diphtheria, he has not had a single fatal case, and he has treated 60. His formula for a child of three or upwards is:—

Tr. fer. perchlor.	5j.
Liq. hyd. perchl.	ʒi.
Glycerin. ad	ʒiij.

Dose.—A dessertspoonful every hour from four to six hours, and then every two, three, or four hours, as the case may require.

For an adult he gives:—

Tr. fer. perchlor.	ʒiij.
Liq. hyd. perchl.	ʒj.
Glyc.	ʒss.
Sol. potas. chlorat. ad	ʒviij.

Dose.—ʒj. each hour, and repeated as in the case of the child.

The addition of potass. iodid. to this mixture does not appear to have any beneficial effect. With this treatment local applications, such as painting the fauces, spraying the throat, or the use of gargles, are not needed, and appear to do far more harm than good. In severe cases poultices and the steam-kettle are certainly beneficial.

IS EXALGINE DANGEROUS?

THERE is no doubt it is; and there have been a lot of letters from medical men about it recently. But Dr. D. G. Braidwood takes the assertions in several of these letters as examples of the facts which go to show how many valuable drugs are thrown into discredit. Those who have written against exalgine do not appear to have inquired how far "the danger" was due to over-dosage. The maximum dose is six grains. One doctor, who raises a warning, administered six grains within an hour to a boy of 14 years, "who had nearly recovered from rheumatic fever"! Even supposing the boy to have been in health and exceptionally robust, Dr. Braidwood considers that the dose was too large. The case is no proof of "the dangers of exalgine." Dr. Braidwood's personal knowledge of the drug extends over nearly twelve months, during which period he has prescribed it with marked success in the alleviation of pain in a great variety of cases. In none of the cases has he seen any symptoms of danger, but he does not think of treating convalescing fever patients—even adults—with three grains of exalgine, and instruct that the dose be repeated in an hour if no benefit follows the first dose. That is where the danger lies.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, January 22.

FAILURES IN AMERICA.—The business failures occurring throughout the United States for the entire year of 1890 are 10,907 in number, being only 25 greater than in the year 1889, when the number was 10,882. The liabilities, however, show a very large increase over 1889. They are \$189,000,000, as against \$148,000,000, an increase of \$41,000,000. These are the largest liabilities since 1884, when they amounted to \$216,000,000. In Canada the failures for the year are 1,847 in number, as against 1,779 the year previous. The liabilities are \$18,000,000 in 1890, as against \$14,000,000 in 1889.

A SCENE AT THE DRYSALTERY AUCTIONS.—At Tuesday's shellac sales Mr. Ziegler rose to call attention to the fact that one of the brokers had stated in his catalogue that the bulk of a parcel of unworked shellac, which was included in the sale, might be seen at the landing-wharf. A gentleman of Mr. Ziegler's firm went there to see it, but was informed that no orders had been given to place it on show. It was alleged that the constant practice of the firm in question was to omit to have the goods offered in their catalogue exposed for examination at the wharves (where a charge is made for placing goods on show), and that the small sample exhibited at the showrooms are an insufficient criterion of the quality of the goods. However this may be, the matter would probably have terminated quickly had not the broker requested Mr. Ziegler, to close the gates of his eloquence in a tone more colloquial than polite. This brought a sharp rebuke from that gentleman, which was again answered in forcible vernacular. We hear that explanations have since been offered to Mr. Ziegler, which that gentleman has accepted.

BROKERS AND JURY SERVICE.—Mr. W. W. Green, the drug broker, of 25 Mincing Lane, has created some stir in the Press this week by his letters on the subject of the grievances of jurymen. Mr. Green has had the misfortune, it appears, to be called upon to perform his duty on the jury, and, as is not unusual in such cases, he and his colleagues have been kept waiting for a considerable part of the day while a case upon which they were not acting as jury was dragging its slow length along. The particular court to which Mr. Green was summoned was No. 9 of the Queen's Bench, where, after waiting till 2 P.M. for the case to finish, he was liberated, his services not being required that day. He thereupon wrote a letter to Mr. Justice Mathew complaining of this practice, and appears to have gained a substantial advantage, for when he returned on the next day of the sitting of the court, he and the other jurors were not only released until mid-day, while part of the case was being concluded, but when at half-past twelve a fresh jury was sworn, the judge inquired whether the case would conclude that day, and upon being answered in the negative at once allowed the jurors in waiting to go. At to-day's drug sales Mr. Green arrived late in consequence of his call to civic duties, and from the pulpit made some remarks upon the subject. He complained that, while he was compelled to attend court at the time specified in the summons, the counsel in the case did not turn up until fully an hour after the time when they ought to have been there.

MORE SHELLAC TROUBLES.—Another firm of shellac brokers, who had long taken a prominent part in the now

defunct "ring," has been under the payment at the end of last week. A meeting of the creditors has been called for to-day. It was rumoured that an effort might be made to help the firm over its difficulties. The liabilities are said to amount to about £35,000, the bulk of which, it is thought, falls upon firms prominently identified with the shellac trade.

ACID (CARBOLIC).—Prices for crystals are still declining, and the makers are now soliciting offers at 5*d.* per lb. for 35° to 36°. We have heard that contracts have been made even below this figure. On the other hand, it is asserted that a very large contract was recently placed in this country by the French Government, and may have the effect of causing a firmer feeling.

ACID (CITRIC).—The market is now firm at 1*s.* 6*d.* per lb. for spot stuff (one maker, we believe, asks 1*s.* 7*d.* per lb.) and 1*s.* 6½*d.* per lb. for forward delivery. The quotation for concentrated juice from Sicily is 23*l.* 17*s.* 6*d.* f.o.b.

ACID (TARTARIC).—*Foreign* crystals are being obtainable at 1*s.* 2½*d.* per lb., powder is held for 1*s.* 3*d.* per lb. *English* tartaric acid is firmly held at 1*s.* 3*d.* per lb.

ALOES.—Of the *Cape* variety only 40 cases were offered to-day, and 24 of these sold, with fair competition, at full prices, though not quotably dearer; fair bright hard brought from 20*s.* 6*d.* to 21*s.* and one case, described as aloes mixed with something else, without stones, sold at the rate of 8*s.* for the whole lot. *Curaçao* aloes in very small supply. A few lots were disposed of at 36*s.* to 37*s.* for fair brown liver, common dark at 10*s.* per cwt. *East Indian* aloes were in good supply. Of *Zanzibars* in skins the arrivals have been somewhat considerable lately; 15 cases of good orange colour, slightly softish, sold at 97*s.* 6*d.* to 100*s.*; softer or darker, from 82*s.* 6*d.* down to 50*s.* Of *East Indian Socotrine* from Bombay 74 boxes fair brown realised 105*s.* to 110*s.*, darker ditto from 80*s.* to 95*s.*, and 9 boxes very hard black rubbish were knocked down without reserve at from 7*l.* 10*s.* per cwt.

AMBERGRIS.—There have been rather considerable arrivals of ambergris, both from the West Indies and from the Australasian fisheries. About 150 oz. of various qualities were offered for sale to-day, and though brokers still suggest high prices, it is probable that the present excessive rates are likely to be put to a severe test. For fine grey, slightly black mixed, from West Indies, it is said that 137*s.* 6*d.* was bid, and the parcel was subsequently bought in at 180*s.*; for another of similar quality 160*s.* was suggested as the price; one piece, weighing 42½ oz., yellow colour and good flavour, was taken out without mention of price. Other parcels were bought in at lower rates.

ANISE.—Of Chinese *Star-anise* several consignments were again offered to-day and all bought in at about 115*s.* per cwt. We have heard it stated that eight cases have been privately sold at 110*s.*, but we think that 105*s.* would be accepted for other lots. Of *Spanish* anise 16 bags fair bright are held for 24*s.*, and some rather dark *Malta* sold at 18*s.* per cwt., while 40 bags *Russian* were bought in at 19*s.*

ANNATTO.—The only parcel offered to-day was one of 23 barrels good bright seed from Ceylon, for which an offer of 1½*d.* was refused.

ARECA-NUTS.—Prices remain exceedingly high. A consignment of 70 bags (which for this article is a very considerable quantity), recently imported from Singapore, was offered to-day, and sold, with competition, at 28*s.* to 28*s.* 6*d.*

BALSAM (PERU).—Higher prices are mentioned, and 6*s.* 3*d.* per lb is spoken of, but we do not think that more than 6*s.* has been paid.

BALSAM (TOLU).—Nine cases in two parcels were offered to-day, five of these good very hard quality sold at 1*s.* 3*d.*, which shows a decline of 1*d.* per lb.; another lot not so hard would be obtainable at the same price.

BENZOLE.—There is a decidedly easier tone in the market, and it would now be easy to buy 90-per-cent., for delivery over the first half of the year, at 4*s.* 7½*d.*; while for 50-per-cent., prompt delivery, 3*s.* 5*d.* to 3*s.* 6*d.* is still the quotation.

LIBRARY

—There is still a tendency towards lower prices, but no sales were effected to-day. Nine bales fair green, slightly stalky, mixed, were bought in at 6*d.* per lb. nominally; and for a rather yellower parcel 3½*d.* was refused.

CALUMBA.—The supply at the auctions consisted of 216 bags, which were all bought in; good yellow mixed sizes, slightly wormy, at 32*s.* 6*d.*; fair, rather greyish, at 25*s.* per cwt.

CAMPHOR (CRUDE).—We do not hear of any business in this article, and prices remain nominal. Over 400 packages were imported this week.

CAMPHOR (REFINED).—Prices are telegraphed higher from Hamburg, 1*s.* 8*d.* being the lowest quotation, while others ask as much as 1*s.* 9*d.*

CANELLA ALBA.—Ten bags of this drug, good pale but rather broken quill, sold at 25*s.* per cwt. to-day.

CANTHARIDES. sold at a decline of 2*d.* per lb. to-day for Chinese flies, of which 10 cases were offered without reserve, and disposed of at 10*d.* per lb. for good quality.

CARDAMOMS.—Of the moderate supply of 106 packages, 50 sold to-day at irregular rates, full prices being paid for ordinary qualities, and one or two fine lots bringing several pence above the valuations. *Mysore*: Medium to bold full pale realised 3*s.* 3*d.* per lb.; rather smaller and yellower, 2*s.* 3*d.*; good medium long yellow, rather unsightly, 1*s.* 8*d.*; small to medium full and pale, 1*s.* 11*d.*; smaller size, 1*s.* 7*d.*; small to medium thin brown, 1*s.* per lb. *Ceylon Malabar*: Good full medium to bold, but grey, 1*s.* 9*d.*; fair medium yellow, 1*s.* 8*d.*; rather duller, 1*s.* 6*d.* per lb. *Wild Ceylon*: Fair quality, but rather mouldy, sold at 1*s.* 3*d.* *Tellicherry*: Medium yellow, 1*s.* 2*d.*; brown, 1*s.* 1*d.* to 1*s.* 2*d.* One lot of *Seeds* was disposed of at 1*s.* 7*d.* per lb.; for another parcel a bid of 1*s.* 6*d.* was refused, 1*s.* 8*d.* being the price named for it. The shipments of cardamoms from Ceylon to all parts during the last four years have been as follows:—

Year ..	1887	1888	1889	1890
lbs. ..	329,434	260,443	295,095	350,836

CASCARA SAGRADA.—Ten bales of good quality were shown to-day. An offer of 30*s.* would have been accepted, but only 26*s.* was offered. American importers assert, nevertheless, that there is a somewhat firmer feeling in the market.

CASSIA FISTULA.—Forty bales dry wormy rattling pods sold at 13*s.* 6*d.* per cwt.

CHAMOMILES.—Good white *Belgian* flowers are being offered at 34*s.* per cwt.; at to-day's auctions 19 bales fair pale were bought in at 25*s.* per cwt.

CINCHONA.—Among the South American barks offered to-day was a new consignment of 119 bales *Guayaquil* bark, which the holders succeeded in placing, though they had to accept a reduction in the price. The quality was not quite up to the standard. Bright mossy quill sold at 1*s.* 2*d.* to 1*s.* 3*d.*, more broken ditto at 10*d.* to 1*s.* 1*d.*, stout broken quill, partly mossy and chips, at 9½*d.* down to 4*d.* per lb. Of 31 bales *Lima* bark 8 were bought in at 5*d.* per lb. for fair quality; ordinary dull brown quill sold at 2½*d.* to 3*d.* per lb. For a parcel of genuine hard yellow *Culisaya* 1*s.* 6*d.* per lb. required; damaged lots sold at 1*s.* to 1*s.* 2*d.* per lb. A parcel of *Red* bark, in bold stout split quills of good colour, was bought in at 15*s.* per lb. nominally. The figures showing the total shipments of cinchona bark from Ceylon are now to hand, and show the following result as compared with previous seasons (in lbs.):—

1880	1881	1882	1883	1884	1885
1,151,102	1,329,454	4,402,901	7,296,671	11,923,190	14,097,142
1886	1887	1888	1889	1890	
14,838,402	11,996,039	13,251,120	9,317,211	8,643,144	

COCAINE.—The manufacturers quote up to 23*s.* per oz. for hydrochlorate, but it would be possible to buy good German make from second-hand holders at 21*s.* 6*d.*—possibly 21*s.*—per oz.

COCA LEAVES.—Only two small lots were offered for sale to-day. One of these, consisting of fine bright green *Truxillo* leaves of good flavour, but very broken, sold at 1*s.* 3*d.* per lb.; for the other, of similar variety, but very broken and dusty, 1*s.* per lb. is named as the price.

COCHINEAL.—The market is steady. Good black *Teneriffe* at 1s. 1d.; silver ditto at 1s. per lb.

COLOCYNTH.—Prices show an improvement and the demand to-day was very slack; 1s. 1d. per lb. would buy good bold partly seedy Turkey apple, and for a parcel of 7 cases Spanish in fragments 10d. to 10½d. per lb. was the price.

CREAM OF TARTAR.—The advance still continues, but for best white *French* crystals 102s. is now the lowest price. *German* powder is quoted at 104s.

CROTON-SEED.—Twenty bags mixed quality from Bombay were bought in at 15s. per cwt. to-day.

CUBEBS.—Good bold, not stalky cubebs, direct import from Batavia, are still held at 21l.; for a parcel of 13 bags, imported *via* Amsterdam, genuine but very small and dusty berries, 16l. 10s. would be accepted.

CUMIN-SEED.—Dull of sale. At to-day's auctions two lots, out of a parcel of 50 boxes *Malta*, sold at 21s. 6d. per cwt. *Mogadore* is still quoted at 16s. 6d. to 17s.

CUTTLE-FISH.—67 packages from the *Cape* were nearly all bought in to-day; for medium to bold palish but partly damp 2d. was refused, 2½d. being the price, and a small quantity sold at that figure; ordinary pieces and dust brought 1¾d. per lb.

DRAGON'S BLOOD.—Four cases good bright lump are held for 9l. 10s. per cwt., an offer of 9l. being declined; some fair finger in reed, rather darkish in colour, sold at 6l. per cwt.

ERGOT OF RYE.—The holders show no inclination to accept the further decline in prices, and 32 bags *Spanish* ergot were all bought in to-day, 1s. 2d. being the price for good bold, offers of 1s. 1d. being declined.

EUCALYPTUS LEAVES.—Three cases, said to be imported from Colombo, were bought in at 7d. per lb. to-day.

GALLS.—*China*: On the spot 61s. is now quoted, and to arrive the quotation has declined to 54s. per cwt., c.i.f. terms. The following figures refer to the exports of galls from China during the following seasons (from November 1 to October 31):—

Years	..	..	1883-7	1887-8	1888-9	1889-90
Piculs	..	..	26,707	32,339	32,478	25,235

GAMBOGE.—The recent advance was not quite maintained at to-day's auctions, prices being about 5s. to 7s. 6d. lower for good quality. Ten cases were all sold: good orange-colour, bold, but blocky pipe, 12l. 15s. to 12l. 17s. 6d., and some bright lumpy pickings at 10l. 17s. 6d. per cwt., the latter price being comparatively high.

GENTIAN-ROOT.—For a parcel of fair thin quality 14s. per cwt. was refused (the price being 14s. 6d.).

GLYCERINE.—The market shows again some slight tendency to recover from the recent depression. German double-distilled 1-260 S.G., which was recently offered as low as 54s. in the second-hand, is now quoted at 55s. to 56s. on the spot.

GUM AMMONIACUM.—Four cases of this gum, which has been very scarce for a long time, were offered to-day. The quality was not particularly good, the best lot consisting mainly of blocky and seedy siftings, with an admixture of good drop and an odour of asafoetida. For this parcel 45s. per cwt. is asked. Fine drop would undoubtedly be well competed for, and realise a high price.

GUM (ARABIC).—The assortment offering at to-day's auctions was insignificant and remained unsold. *East Indian* gums are a dead letter at present. For white *Mogadore* a somewhat better demand is reported. Prices range from 5l. upwards, and 5 barrels of fine bold white gum have sold at 11l. per cwt. Fair sales of *brown Barbary* have been made at 55s. to 60s. per cwt.

GUM BENZOIN.—*Siam* gum was again very largely represented at the auctions, and of the 33 cases offered 10 sold at a decided decline in value. Fair bright almonds, partly bold, but mostly small and blocky mixed, were bought in at 14l. 10s. to 15l. per cwt. For another lot of rather holder description an offer of 13l. 10s. was refused, and the parcel bought in at 18l. Five cases small blocky almonds sold at 8l. 10s., and five cases bright blocky siftings at 6l. 2s. 6d. per cwt. Of about 120 cases *Sumatra* gum, about 30 sold at

some slight advance on fine quality, 10l. 2s. 6d. to 10l. 5s. being paid for very fine white almonds of good flavour, and but very slightly false packed. Fair seconds, good almondy centres, but false-packed borders, realised 7l. 10s.; and for a more false-packed and duller lot 7l. to 7l. 2s. 6d. was paid. Ordinary thirds, very false-packed and woody, sold at 80s. to 85s. per cwt. *Palembang* gum, fine bold bright orange, in small tins, was bought in at 65s. per cwt.; for low earthy resin there was no answer to a suggestion of 18s. per cwt.

GUM GALBANUM.—Several consignments, totalling up to 31 packages, were offered, partly under the name of galbanum and partly as bdellium. This gum is the same bright orange gum resin which has been described as opoponax before. Some of it was to-day bought in at 60s., another lot at 40s.; for the latter an offer of 20s. was said to be made.

GUM GALBANUM—OR WHAT?—At to-day's auctions some gum of undefined character was offered by several brokers. One catalogued it as bdellium, and the others as galbanum, the latter article being well known to be exceedingly scarce at the present time. When the first galbanum-man reached the lot in his catalogue he was asked by some of the druggists whether it was galbanum, or what he sold it as. The answer was that he sold it under the name which had been given to it by the docks—namely, gum galbanum, and, added the broker, "everyone knows what it is." That was just what everyone did not know, and Mr. Umney curiously inquired of him whether he could oblige them with the name; but the broker did not satisfy curiosity upon this point.

GUM MYRRH.—Large supplies of 122 packages, including several lots of unusually fine quality, met a good demand, and prices were well maintained. About 60 packages sold at 7l. 17s. 6d. up to 8l. 2s. 6d. for very fine pale Bombay picked (from 8l. to 8l. 10s. being suggested for another parcel); good hold Bombay and Calcutta picked gum brought 5l. 10s.; good Aden sorts, 72s. 6d.; good clean hold siftings, 55s. to 62s. 6d.; small ditto, 26s. to 35s.; and pickings down to 15s. per cwt. for common.

GUM SANDARACH.—The importers say that there is a fair amount of business doing at the rate of 100s. to 105s. per cwt. for new crop.

HELLEBORE ROOT.—Of 20 two-cwt. bales of good quality one-half was sold at 20s., and for the remainder an offer of 19s. will be submitted.

HONEY.—Prices are well maintained; for 4 barrels pale yellow candied *Jamaica* an offer of 43s. was refused to-day. Of 40 kegs good hard white *Chilian* 30 sold at 45s.; while 30 cases fine candied pale to amber *Californian* were bought in at 60s. per cwt. nominally.

INSECT-FLOWERS.—A better feeling has set in at Trieste and reacted upon the other markets. The stock at the former place has been reduced within a short space from 430 to under 300 tons, one single order of 75 tons having been executed for the United States. Closed flowers are now quoted at 78s. per cwt. c.i.f. terms to-day, while for open flowers, of which the stock is exceedingly small, 60s. to 62s. per cwt. is the price.

IPECACUANHA.—41 packages offered to-day, of which 28 sold at very full prices to an advance of about 1d. per lb., good root sound or slightly damaged, partly stout mixed realised 7s. 9d. to 7s. 10d. per lb.; thinner, dusty, mixed and more damaged ditto from 7s. 7d. to 7d. 9d., and one lot of thin and third class damaged root, 7s. 6d. per lb.

JALAP.—The market is unsettled, and distinctly tending lower. At auctions 6 bales were offered to-day, and bought in at 1s. 9d., though perhaps 1s. 5d. to 1s. 6d. would have been accepted. The quality was rather mixed, and partly small; one lot second-class damaged and burnt sold at 1s. per lb. For arrival, *Vera Cruz* is being offered at 1s. 6d.; on the spot various prices are asked, ranging from 1s. 8d. to 2s. per lb. The chances appear in favour of still lower prices.

JUNIPER BERRIES.—Prices are still advancing; for a lot, of 30 bags from Leghorn offered to-day 11s. 6d. was refused 12s. being named as the price.

KAMALA.—10d. per lb. is said to be still the price paid

privately for fair bright quality, and that price would be accepted for two cases shown on auction to-day.

KOLA NUTS.—Thirteen packages offered to-day were mostly sold. Good bright *West Indian* are held for 9d. per lb. to 1s. 1d. per lb.; and fair, rather mouldy, sold for 6d. per lb. Six packages from the West Coast of Africa, bright to very mouldy kolas sold at 2d. to 3d. per lb.

LIME JUICE.—Prices are said to be advancing, in consequence partly of considerable orders which have recently been executed for Government account; 300 puncheons are said to have been taken out of the market in this way. At the auctions to-day 16 puncheons sold at 1s. 2d. per gallon.

MATICO—For 12 bales fair leaves, partly dark mixed and broken, 5d. per lb. is asked.

MERCURIALS.—On Friday, as foreshadowed in our last report, English manufacturers reduced their prices for all mercurials by 1d. per lb. *Calomel* is now 3s. 4d. per lb., and the others are priced at a proportionate decline.

MORPHIA.—The market is quiet, and we hear of some further small transactions at 4s. 8d. per oz.

MUSK.—There is an exceedingly dull tone in the market for this article, of which a considerable quantity was offered to-day. Of 42 caddies first pile *Tonquin* pods only two caddies sold, at 80s. per oz. for good small to bold dry pods, well trimmed, thin blue skin; and 70s. 6d. per oz. for very broken thin-skin pods. For good small to bold old-fashioned pods 75s. per oz. is asked. Fine third pile thin blue skin, but damp pods were bought in at 60s. per oz. Musk skins sold at 1s. 4d. per oz.

NUX VOMICA.—A parcel of 65 bags fair bold silky seeds sold to-day at the full price of 12s. 6d. per cwt. At auction 60 bags rather dark and ragged Bombay seeds were bought in at 11s. per cwt.

OIL (CASTOR).—For forty cases yellow *Madras* oil shown to-day 3½d. per lb. is named as the limit. Under date of December 30, Calcutta reports a lower market.

OILS (ESSENTIAL).—*Star-anise* oil is reported to have advanced 1d. per lb., 6s. 9d. having been paid. The c.i.f. quotation is still 6s. 1d. per lb., but we hear it said that for Jan.-Feb. shipment it might be possible to obtain some at 6s., c.i.f. Of *Cassia* oil 15 cases were bought in to-day at 3s. 9d. per lb. Of *Citronelle* 68 cases of 4 tins each were partly sold at ½d. to ¾d. per oz. We have heard a report of a fair business in Japanese oil of *Peppermint* mostly at 4s. 8d. and some at 4s. 9d. per lb. American (H.G.H.) steady at 14s. 9d. per lb. *Menthol* firmly held at 9s. 9d. per lb. for good white crystals. At to-day's auctions 9s. 3d. per lb. was refused for 4 cases rather grey crystals. Essential oil of *Lemon* is again dearer, all the Sicilian manufacturers having raised their prices. The following are the total exports of citronella (including lemongrass) and cinnamon (including both bark and leaf oil) from Ceylon since 1887 (in ounces):—

Year	1887	1888	1889	1890
Citronella, &c.	8,801,024	9,481,465	9,915,225	12,820,315
Cinnamon	35,423	141,293	87,233	103,171

OIL (OLIVE).—The new Italian eating-oils will be on the market shortly, shipments of the new crop being now on the way. The quality of the new oil is said to be excellent. Table oils are quoted at from 4s. 6d. up to 6s. 6d. (for cream oils) per gallon.

OPIMUM.—Business has been almost at a complete standstill in London this week, and no alterations have occurred in the quotations. Our reports from Smyrna, dated January 10, are as follows:—The year has so far witnessed very little activity in the opium market. Business has been restricted to tale quale opium, both old and new, of which about 86 cases have changed hands at low prices (equal to from 8s. 11d. to 9s. 1d. per lb.), though with a somewhat firmer tendency at the close. The principal holders are firm, and refuse to take reduced prices, but many of the smaller fry have taken fright.

ORANGE PEEL.—Much higher prices are paid for fine quality in consequence of the failure of the crop; one case good narrow strips, for which a few months ago 6½d. was paid, changed hands again to-day at 1s. 3d. per lb.; two other cases fine narrow-cut strips realised 1s. 4d. per lb.; 63 packages brown ditto were bought in at from 8d. to 10d. per lb.

ORRIS ROOT.—There is no change in the prices of *Italian* orris root since we last quoted it. At to-day's auctions 5 serons fair, partly dark *Mogadore* sold at 34s. per cwt.

PEREIRA BRAVA.—Of 22 bales of fair quality 10 sold to-day at 40s. per cwt.

PATCHOULI LEAVES.—Five bales fair brown quality sold very cheaply to-day at 3d. per lb.

POTASSIUM PERMANGANATE.—The market is reported firmer, and second hand holders quote 59s. to 60s. on the spot for small crystals.

QUASSIA WOOD.—Prices have advanced since our last report, and 6l. has been paid for dried logs privately, while 5l. 10s. is reported to have been paid for new ditto; but at to-day's auctions prices again suffered a decline from those rates, and about 40 tons were sold at from 5l. 2s. 6d. to 5l. 10s. for new wood. Fifty bags fine dried chips from St. Kitts realised the comparatively high price of 7l. 15s. per lb.

QUICKSILVER.—The market is quiet, and both first and seconds are nominally held for 8l. 12s. 6d. per bottle.

QUILLAIA.—Tending higher: 18l. 10s. per lb. is now the price.

QUININE.—No business has been done in the private market. For to-day's auctions 30,000 oz. *Auerbach* quinine in bulk had been declared, but these were not offered, as it was said that in the meantime they had been sold for export. We have heard that 11½d. per oz. has been accepted for this parcel, which would certainly be the lowest price on record. Another parcel of 5,000 oz. *Brunswick* sold in one lot to-day at 11½d. per oz., usual terms. The following figures denote the average percentage equivalent in sulphate of quinine of the principal cinchona barks of commerce during the last three years:—

	1890	1889	1888
Ceylon cinchona bark	2½	2½	2½
East Indian	2	2	2½
Java	4	4½	4
Calisaya cultivated	4½	4½	4½

The following are the unit prices (in pence per lb.) of cinchona bark in London on January 1 of the last seven years:—

1885	1886	1887	1888	1889	1890	1891
6 to 7	4½ to 5	3½ to 3½	2½ to 2½	1½ to 1½	1½ to 2	1½ to 1½

RHUBARB.—The 67 packages offered to-day encountered an exceedingly dull market, and only a few lots sold at unchanged prices. *Shensi*: Medium to hold flat, fair orange coat, three-fourths pinky fracture, at 2s.; medium to bold, rough coat, half-dark fracture, flat, 1s. 6a.; mixed sizes, rough coat, dull fracture, round and flat mixed, 1s. per lb.; and very common rubbish, without reserve, 7d. per lb. *Canton*: Round small to medium, bright coat, grey pinky fracture, 1s. 4d.; for ditto flat 1s. 3d. was refused; medium to hold round and flat mixed, slightly wormy, dull rough coat, of fair fracture, 11d.; ditto dull coat, slightly worn, 10d. per lb. Of *Rhapontica* 20 bags medium to hold, rather dark, sound Austrian sold without reserve at 3½d. to 3½d. per lb.

SARSAPARILLA.—About 70 bales grey *Jamaica* sarsaparilla were offered to-day, and of these a considerable proportion sold at about 2d. per lb. decline; sound, fair, at 1s. 2d.; damages at from 1s. to 1s. 2d. per lb.

SCAMMONY.—Fair quality root may now be had at about 25s. per cwt.

SENNA.—Of *Tinnevely* 148 packages, fair, mostly of very inferior quality, were offered, and sold at from ½d. to ¾d. per lb. advance; medium to holdish but specky yellowish mixed from 2½d. up to 4½d. per lb.; common partly false packed and small greenish, 1d. to 1½d. per lb.; 15 bales very common yellow *Mecca* mixed with pods and stalks sold at ¼d. per lb.

SHELLAC.—The market has been demoralised this week, mainly in consequence of occurrences alluded to elsewhere. At Tuesday's auctions 405 cases were offered, of which 169 sold at a decline of fully 3s. on *Second* orange (fair to good red, 64s. to 68s.), and about 2s. on *Garnet*; good free, 70s. to 73s.; fair curly, 68s. to 69s. per cwt. One catalogue of 300 cases advertised "without reserve" was withdrawn. Since the sales there has been little or no business, although the feeling in the market is said to have improved.

STROPHANTHUS.—Two cases, altogether 243 lbs., small but genuine green *Kombé* seed were offered to-day; the price named at auction was 6s., but we understand that that has since been refused, and that 7s. is asked.

TEA.—The tea market maintains a very firm tone for all kinds. On Tuesday a Congou sale, rather larger than usual, resulted in slightly easier rates for common undesirable leaf tea, but the terminal market keeps very steady, with prices only about one point below the highest ever touched since its establishment. Common siftings sold at higher prices on Tuesday, very poor stuff being shouted for at $4\frac{1}{2}d$ per lb. Scented teas are steady, with a fair country demand in spite of the present high prices. *Indian* teas keep very dear for all lower grades, this being due in part to the probable deficiency in the crop, and more immediately to the terminal market speculation. Pekoes from 11d. up show the least rise and the best value at the moment; but teas under 9d. are terribly dear and dangerous stock. *Ceylons* must be quoted $\frac{1}{2}d.$ to $\frac{3}{4}d.$ per lb. up for all teas under 10d., and the broken Pekoes, which till recently showed remarkable value, from 11d. to 1s. 2d., are up in many cases 1d. per lb.

TONQUIN BEANS.—Thirty-four packages *Pará* were offered at to-day's auctions; for good bright frosted 4s. 6d. per lb. is asked, an offer of 4s. being refused; slightly to very foxy are priced at from 2s. 6d. to 3s. 3d.; and one lot, very red, sold at 2s. 5d. per lb.

TURMERIC.—Fourteen boxes very wormy split rough *Cochin* bulbs sold to-day at 8s. 6d. per cwt. Under date December 31 the Calcutta market is described as weak with an inclination on the part of holders to accept lower prices. The growers of *Coringa* turmeric, it is asserted, find that that cultivation does not pay them, so they are taking up the growing of rapeseed instead, and *Coringa* turmeric has become very scarce.

WAX (BEES).—Prices are well maintained. Of 21 packages *Jamaica*, the bulk sold—grey and brown, 6l. 2s. 6d. to 6l. 5s.; good red, 6l. 10s.; fine yellow, up to 6l. 17s. 6d.; fair *Zanzibar* wax brought 5l. 5s.; fine *Madagascar*, 5l. 12s. 6d.; and 16 cases very fine white *Bombay*, from 7l. 10s. to 7l. 12s. 6d.; for another parcel of bleached *East Indian*, guaranteed pure, an offer of 7l. 15s. was refused.

WAX (JAPAN).—Easier, 100 cases fair pale squares selling at 41s. per cwt.

CHEMICALS IN THE NORTH OF ENGLAND.

THE MARKET FOR HEAVY CHEMICALS during the past week has been a quiet one, more especially in the Tyne district, owing to the continued stoppage of shipments to the northern Continental ports, which have not yet been freed from ice, but are expected shortly to be in a condition for navigation to be resumed. The railway strike in Scotland is also affecting the demand for chemicals.

BICARBONATE OF SODA for early delivery is quoted from 7l. to 7l. 5s. per ton., in 1-cwt. kegs, f.o.b. Liverpool.

BLEACHING-POWDER.—Steady and firm in price. For prompt and forward deliveries makers quote 6l. 12s. 6d. per ton on rails and 6l. 15s. f.o.b. Liverpool, in softwood casks, and 7l. per ton, in hardwood casks, f.o.b. Liverpool. Newcastle market quiet, with little doing; makers quote 6l. 15s. per ton, less $3\frac{1}{2}$ per cent. for softwood casks, but second-hands are offering at 6l. 7s. 6d. per ton net. Hardwood casks are 5s. per ton extra.

CAUSTIC SODA continues firm at 10l. per ton for 60-per-cent. white, 11l. 5s. per ton for 70-per-cent., and 12l. 5s. to 12l. 7s. 6d. per ton for 74-per-cent., f.o.b. Liverpool, less $3\frac{1}{2}$ per cent. Newcastle market firm at 12l. per ton for 77-per-cent., net cash, and 11l. 5s. per ton, less $3\frac{1}{2}$ per cent., for 70-per-cent., f.o.b. Tyne.

CHLORATE OF POTASH.—Very firm at $5\frac{1}{2}d.$ to $5\frac{3}{4}d.$ per lb., less 5 per cent. discount, at usual ports of shipment.

HYPOSULPHITE OF SODA.—In brisk demand, at 6l. 10s. per ton in kegs and 6l. per ton for casks, f.o.b. Tyne, less $2\frac{1}{2}$ per cent. For delivery in Liverpool and Manchester the price is 6l. 15s. and 7l. 5s. per ton for casks and kegs.

SODA ASH.—Continues in good demand, at $1\frac{1}{2}d.$ per degree

for caustic, and $1\frac{3}{4}d.$ to $1\frac{1}{2}d.$ per degree for carbonated, f.o.b. Liverpool. No change to report in Tyne prices, which stand at $1\frac{1}{2}d.$ per degree for carbonated, less $3\frac{1}{2}$ per cent. Amongst the shipments to the United States from the Tyne this week is a very large quantity of ammonia soda ash from the Middlesbrough alkali-works.

CREAM CAUSTIC.—Firm, at 9l. 12s. 6d. to 9l. 15s. per ton, f.o.b. Liverpool, for prompt. If delivery taken at makers' works, an allowance of 2s. 6d. per ton is made.

SODA CRYSTALS.—Quiet, but steady in price—3l. 10s. to 3l. 12s. 6d. per ton, f.o.b. Liverpool, early delivery. Tyne market quiet, makers asking 2l. 17s. 6d. per ton net; but some second-hands offering at 2l. 16s. per ton for prompt.

SULPHATE OF COPPER.—Continues dull, at 17l. 15s. to 18l. per ton, less 5 per cent., f.o.b. Liverpool, for prompt delivery.

SULPHATE OF SODA.—Quiet, at 42s. 6d. per ton in bulk, on rails Widnes and St. Helen's, and 56s. 6d. per ton, ground and packed in casks, f.o.b. Liverpool. Tyne market unchanged, at 42s. 6d. per ton in bulk, and 53s. per ton ground and packed in casks for export, f.o.b. Tyne, all less $3\frac{1}{2}$ per cent. discount.

GERMAN MARKETS.

HAMBURG, January 20.

THE opening weeks of the new year have been thoroughly lifeless in business here, and all transactions have been confined to that which was absolutely necessary to the consumers. The long-continued frost seriously interferes with our communications with the outside world, and navigation has practically been suspended. Under these circumstances most drugs and chemicals are being offered very freely, and with few exceptions prices rule in favour of buyers.

ANTIMONY.—Easier; on the spot and for delivery both 80m. for crude Japan.

BALSAMS.—*Copaiba* maintains its firm tendency and the importers do not offer any; Maracaibo is worth from 5m. to 5.10m. *Peruvian* balsam shows more life since the opening of the year, and the speculators have again increased their pretensions. Our arrivals last year were about 200 cases less than the year before, and this induces people to think well of the article. Stocks are unimportant.

CAMPHOR (REFINED).—Prices have again been raised to 380m.

CONDURANGO.—A better demand prevails, and several parcels now floating have been taken out of the market at high prices.

JALAP shows a falling tendency. The imports accumulate, and it seems as if the American speculators have given up all hope of the article. Fine quality is being offered at 2.75m.

MENTHOL.—Prices are again rather higher.

QUILLAIA.—Absence of arrivals and the unfavourable political conditions in Valparaiso have caused an advance in the article, which can now no longer be had under 42m.

WAX (BEES) remains exceedingly scarce, and brings high rates. About 5,000 kilos. *Mogadore* have recently been imported, but these are held for high prices. For *Chilian* 122 $\frac{1}{2}$ m. is required.

THE AMSTERDAM CINCHONA AUCTIONS.

(Telegram from our Correspondent.)

AMSTERDAM, January 22.

AT to-day's bark sales 1,713 packages Java cinchona were disposed of at a decline in price, the average unit not exceeding $7\frac{1}{4}$ cents ($1\frac{1}{4}d.$ to $1\frac{3}{4}d.$ per lb.) The following was the range of prices:—Manufacturing barks in quills, broken quills and chips, 8 to 57 cents ($1\frac{1}{4}d.$ to $10\frac{1}{2}d.$ per lb.); ditto, root, 14 to 53 cents ($1\frac{1}{4}d.$ to $9\frac{3}{4}d.$ per lb.); Druggists' barks in quills, broken quills, and chips, 15 to 132 cents ($2\frac{3}{4}d.$ to 1s. $11\frac{1}{2}d.$ per lb.); ditto, root, 12 to 22 cents ($2\frac{1}{4}d.$ to $4d.$ per lb.). The principal buyers were the Auerbach and Amsterdam quinine works.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish; if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest; we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

Henry Bowman Brady.—A Retrospect.

SIR,—I read with regret, in last week's CHEMIST AND DRUGGIST, the death of one whom I have known for nearly thirty-five years—Henry Bowman Brady; and the announcement of the event brought vividly before me many pleasing episodes in connection with Newcastle-on-Tyne pharmacy.

Thirty-five years since! Those were the days of what I term "rollicking pharmacy." If you had ambition and felt that you were something more than a mere tradesman, you could do yourself the "honour" of taking a trip to London or Edinburgh and submit your mental faculties to the tender mercies of the Jacob Bells of the good old school. There was no compulsion. Even the "Prelim." could be settled to your satisfaction by the family doctor. I can recall the interview with my *Galen domesticus*. "Know Latin? Of course you do—'Gallia est omnis divisa in partes tres!'" "Yes, sir." "Mind you don't divide into more than three parts," said the irascible M.D., "when you go in for the Minor." I did not; but the "gall riz" at some of the questions put. Those were the days when stores did not trouble, when cutting grocers were yet at rest. They were the days ere eight-hour or early-closing movements had dawned on the labour horizon; the days when the movements were of the more muscular character in connection with half-hundredweights of pilula hydrargyri, or 7-lb. lots of hydrarg. c. cretâ.

At the time of which I am writing Mr. Brady was in business on the side of Mosley Street, opposite where Mr. Martin now so ably presides. Thirty-four years since I had just entered the mysterious portals of pharmacy. I was apprenticed to a friend and neighbour of Mr. Brady's, the late Mr. Mawson.

Of course my acquaintance with Mr. Brady was at that time of a very menial character. "Please, sir, can you spare ns—?" Well, I won't say what. Of course chemists were, as a rule, very Masonic, and willing to help a distressed brother when his stock of tetrahydroparamethyloxychinoline—I beg pardon: coal-tar derivatives and all such abominations of desolation had not then disturbed the mental equilibrium—had run short. I am not quite certain as to dates, but, so far as I can remember, it was in the year 1859 that an attempt was made to start classes in botany, pharmacy, and chemistry in Newcastle-on-Tyne.

The initiatory meeting was held in a hall—I believe it was the Cordwainers' Hall, in the Castle Garth. A room was engaged at the back of Clayton Street. Henry Bowman Brady and Barnard S. Proctor (that Nestor of practical pharmacy) generously undertook the delivery of the first course of lectures. As I write I can vividly recall that first lecture on botany by Mr. Brady, illustrations of the early life of a plant, drawn by the lecturer himself, adorning the walls. There was the radicle, or young root; the plumule, or young stem; the cotyledons, or young leaves; and nice radicles some of us were. We tried to stem the upward current of the sap of pharmaceutical education; but, Dick Swiveller-like, we had to succumb to the force of circumstances, and be tamed by the smiles and kindness of the lecturer. Mr. Brady was a born teacher. He knew exactly how to bring home to youthful minds the essential first

principles of structural botany, and to lead them by engaging steps to the higher walks of a most engaging science. Then, in the spring and summer months, we had "outings," in search of living specimens, to Denton Burn, or away over Scotswood Bridge to Ryton or Dilston. I fear I was not an ardent explorer, the exuberance of youth too often frothing over and hiding the lower stratum of research; still, those lectures and outings, in what I might almost style the ancient days of modern pharmacy, can never be forgotten, or the knowledge acquired ever effaced. Examinations were held periodically, and prizes awarded. I never succeeded in gaining a prize, but my fellow-apprentice and senior, now a partner in one of the first wholesale houses in the provinces, was more successful. When, some years subsequently, I "went in for the Minor," the examiner in botany complimented me on the answers I had given to his questions, and I mentally thanked my old teacher, Mr. Brady, for the success I had achieved mainly by his lectures and kind assistance.

At a later period I came in contact with Mr. Brady on other lines. He was then local secretary of the Pharmaceutical Society, and I had ventured, with much fear and trepidation, to send a communication to the *Journal*. In the course of a few days I had a note requesting me to call at 40 (I think 40 was the number) Mosley Street. I did so. A proof of my article had been sent to Mr. Brady by Professor Redwood, editor of the *Journal*, and I had to read and correct it. That was my first appearance in print. At a still later period micro-photography brought me into still closer relationship with the deceased pharmacist, and I have in my possession negatives taken by myself to illustrate lectures delivered by him to one or more learned societies in London.

What you state in your article is true—"pharmacy has lost one of her most gifted sons"—and as I write I cannot help thinking that science and pharmacy have much to be grateful for in a Brady, a Mawson, a Proctor, a Swan; and as memory reverts to those old days of Newcastle pharmacy, I feel a debt of grateful remembrance due to him who has just passed away. Scattered far and wide are his pupils—scattered far and wide are those who have benefited by his kind advice and assistance; but as an old pupil, never from the table of my memory can be effaced the lessons for good derived from the teachings of Henry Bowman Brady.

AN OLD PUPIL.

The Pharmacy Bill.

SIR,—In view of the apathy, if not active opposition, with which the Pharmacy Bill will be treated unless it contains a clause prohibiting any future formed company trading as a chemist and druggist, would it not be possible to reverse Mr. Carteighe's proposal, and instead of adding a clause in committee, or as an amendment, to put it into the original Bill? And if it is found utterly impossible to introduce or press it with this clause, it could then be dropped in the same way as it is now proposed to be introduced, and we should then have to be contented with what we could get. It would, at least, have been tried, and if it failed the Society would have gained the support (for their Bill as it stands now) of many who, like myself, would prefer to try for a whole apple rather than half, but who would, nevertheless, be willing to accept half if the whole was proved (not stated) to be unobtainable. A Parliamentary election cannot be far off, and with that clause in most of us would be prepared to sink our political views, and vote only for those candidates who would pledge themselves to support the Pharmacy Bill, and work also among our friends and relations to bring pressure to bear on candidates for the same purpose. It is a maxim in business to ask for at least as much as you hope to receive, and it is a very difficult matter to add to it. Let the Society but meet us outsiders in this manner half way, and I feel sure they will not lack support, either for their Bill or membership. I for one should be as pleased to rejoin them as I felt sorrow in leaving them when I felt that it was hopeless to expect to get value for my annual guinea.

On another subject may I also ask for a few words? Indirectly, the Beecham correspondence has opened up a subject of great interest. Is it a matter of trade policy to

open packages of proprietary medicines and retail them in pennyworths? If so, where is it to stop? Mr. Buck and others who have suffered from Mr. Beecham enforcing his just rights could easily have avoided it by declining to sell except in original packages. The customer in all probability would either have taken a box or else would have said, "Well, give me a pennyworth of your pills." Mr. Beecham is doing the trade a real service in instituting these proceedings, if it tends to check this practice. The gain in the transaction is not worth the risk, as a lawyer will naturally make a case of it if he possibly can; besides which it is suicidal policy to destroy the penny trade, on which so many of us live, in this way. Apologising for troubling you at this length,

I am, yours faithfully,

Rochester.

C. F. WYATT.

Photography in "The Chemists' and Druggists' Diary" for 1891.

OUR "Photographic Notes" contributor writes as follows:—We naturally look out for any advertisements and applications of photography to advertisements in the DIARY, because of our personal interest in the subject, and also because so many commercial firms are now utilising photo-mechanical processes for making their advertisements more attractive. The popular vote has accorded to Messrs. Armbricht, Nelson & Co.'s illustration of "the skeleton of a coca-leaf" the palm in beauty, though personally we consider Burroughs, Wellcome & Co.'s "Thatched Cottage" on p. 129 decidedly the more artistic; "the future home of the coca wine" is obviously from a black-and-white plan, and not from the actual buildings, the want of fine detail at once deciding this, without any such statement as "in progress of building." Opposite Burroughs, Wellcome & Co.'s large factory there used to stand some years back an old lightning-struck tree, and this had partly fallen, but still threw out shoots and foliage, and the whole, drooping over a reedy, weedy pond, made a capital little picture; and at the east end of the factory was a tumbledown old-fashioned house covered with ivy—another pretty little subject. We wonder whether they are there now. Judging from the process illustration in the DIARY, Messrs. Burroughs, Wellcome & Co. have considerably swept, garnished, and improved the factory and its surroundings. There used also to be two or three very fine swans on the piece of water in front of the factory: where have they gone to, or are they still in existence?

The advertisements actually treating of photographic goods are those of Perken, Son & Rayment, a very complete catalogue of their goods; then J. Lancaster & Son's advertisement, which includes several novelties well likely to catch the fancy of amateur photographers. We have been using lately one of this firm's combination "Mulum in Parvo" cameras for enlarging with excellent results, and have also used it as a studio camera for life-size heads, with a 30-inch focus lens; the camera may also be taken in half, used for reducing, copying full size, &c., and is an instrument of almost universal use, and excessively cheap—a 15 × 12 being only 63s, with lens and dark slide. Another novelty is their "Rover" detective camera, which ought to have a big boom the coming summer at the nominal price of 63s. Marion & Co. and Orme also offer apparatus, and Barclay's are the first sundries house to take advantage of the craze for photography; and there is no reason why other houses should not follow their example, as many chemists (especially country chemists) would, we are sure, be only too pleased to order goods through their sundries house instead of ordering direct, and thus save something in carriage.

The Beecham Suits.

SIR,—While Mr. Buck lay under the reproach of Mr. Beecham's action those who have the honour and integrity of pharmacists at heart kept silence. Mr. Beecham has now appealed from the legal courts to the conscientious tribunal of a body of men who like to think themselves foremost in honesty among mercantile traders, and to Caesar the appeal has come. It is true Mr. Buck has been tardy in stating his full case, but now his letter of last week states a clear issue. The *onus probandi* clearly lies with Mr. Beecham, and we to

whom he appeals have the right to call upon him to prove his case, or to admit that his agents have made a mistake, and make the full reparation required, financial and in reputation.

None the less does he owe this to himself, for, if his case is not a full and distinct answer to Mr. Buck, he has damaged himself in the eyes of those who have it in their power to impose a heavy penalty. Should questions of fact arise which cannot be weighed in the columns of your paper, let arbitration be adopted, or let Mr. Beecham take action in some summary mode, by which Mr. Buck can meet him without the enormous expense to which a case in the highest legal tribunals would subject him.

I have not the honour of a personal acquaintance with either gentleman, but I do feel that the reasons are urgent for a thorough inquiry.

11 Grey Street, Newcastle-on-Tyne, January 20.

Yours faithfully,
T. MALTBY CLAGUE.

Mistura Olei Ricini.

SIR,—The "mistura olei ricini" of the B.P. Additions appears to be a bone of contention, and has already excited adverse criticisms from pharmacists in your columns. Whatever may be thought of this mixture pharmaceutically or medicinally, there is no doubt that various results have been obtained by different manipulators. Mr. Conroy cannot make the preparation according to the B.P. directions, but I have to record that, without any difficulty whatever, and following carefully the directions of the Pharmacopœia, with, of course, genuine oil and potash solution of proper strength, I succeeded in making an excellent, inseparable, and nearly white mixture. I may say that the liquor potassæ was exactly of the strength of 27 grs. in 1 fl. oz., and that the castor oil had been kept on the dispensing-counter for some time in a stoppered bottle half full. It would appear that an old oil, and therefore one that is very rancid, is well adapted for the preparation of this (as it appears to me to be) solution of scented soap.

It has occurred to me that possibly the orange-flower water, being generally somewhat acid, according to its age, may be a cause of the separation or non-successful preparation.

One would hardly be surprised if a patient should mistake this mixture for the preparation for the hair popularly known as "lime-juice and glycerine."

Yours faithfully,

Sedgley, January 16.

J. T. EGGINTON.

The Tyrer Testimonial.

SIR,—I fear that the report of the meeting at which the testimonial was presented to Mr. Tyrer shows that sufficient prominence was by no means given to the invaluable services of the secretary, Mr. C. C. Hutchinson, to whose zeal and energy it is impossible to give too high praise.

Stratford, near London, E., Believe me, yours truly,
January 20.

DAVID HOWARD.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

5 × 4.

A correspondent (209/77), writing on behalf of several students, asks us to give a full rendering of the following, which has been given at the Minor examination. None of the pharmaceutical Latin books (says our correspondent erroneously) give any information about the 5 × 4 problem:—

Empl. Bellad. 5 × 4 on leather.

A good classical authority renders the prescription for us as follows:—

Emplastrum Belladonnæ in alutâ longitudine quinque pollicum, latitudine quatuor pollicum.

But (209/77) could have gathered the exact technical form for prescription Latin by referring to the examples in

Ince's Latin Grammar of Pharmacy, in which case the rendering would be:—Mitte emplastrum helladonnæ pollices quinque longum et pollices quatuor latum.

Not an Emulsion.

Sir,—What sort of an emulsion ought the following to make?—

Pulv. sacch. alb.	..	..	..	..	3iss.
Glycerini puri	..	..	..	..	3iss.
Ol. jecoris ad	..	..	..	..	3vijl.
Ft. emuls.					

It is a prescription by a London doctor, but does not do well at all. Would it be legitimate to add anything, say tragacanth pulv.; or would it be better to just send it out with a "Shake-the-bottle" label?

EMULSION. (220/70.)

[The ingredients do not make an emulsion at all. We have seen several prescriptions of the same kind, the writers meaning the mixture to be shaken well by the patient before each dose was taken. This is what should be done in this case.]

LEGAL QUERIES.

218/34. *Vernet* asks:—"In a drug company, where an assistant is the only qualified person, who is responsible for an apprentice's or other unqualified person's errors, &c.?" [The drug company which owns the shop is responsible pecuniarily.]

215/65. *Allee*.—It is probably not unlawful for an unqualified person to write a prescription if he do not supply the medicine. We do not think by so doing such a person would "act as an apothecary." You can only sell such medicines as are subject to medicine-stamp duty by taking a medicine licence. If you do not know what medicines are liable get "Alpe's Handy-book of Medicine-Stamp Duty," 2s. 6d., or post free from us 2s. 9d.

221/62. *Cupar*.—A licence is required to sell Coleman's meat and malt wine, though the makers put up a non-alcoholic variety, and also a wine with quinine, both of which can be sold without a licence.

224/4. *Senex*.—If the agreement to take or give three months' notice is admitted, it can be enforced even though not in writing. If it cannot be established to the satisfaction of a court, the usual month's notice would probably be ordered.

223/59. *J. B.*—An apprentice, on reaching the age of 21, cannot be compelled to fulfil the conditions of the contract made on his behalf with his parents or guardians. It is frequently the custom therefore, in the case of apprenticeships which will not terminate with the youth's responsibility, to insert a clause attaching liability to a penalty to the father or other guardian in the event of the apprentice refusing to serve on reaching his majority.

223/45. *S. W.* asks, "As pulv. sodæ tart. effervescens is now official is it necessary that every package sold and labelled 'Seidlitz powder' should be the weight ordered in the B.P. Additions?" This does not become necessary on the basis of the decision in the sal volatile cases, for "seidlitz powder" is not named in the Additions as a synonym. But in the Additions a footnote states that "effervescent tartarated soda powder is commonly known as seidlitz power." In the event, therefore, of a prosecution for selling something else as seidlitz powder, or for supplying less than the quantity indicated in the formula, it is clear that the Additions would provide very strong evidence of the general opinion and custom, so that the footnote has almost, if not quite, the force of a synonym.

223/56. *P. M. H.*—Wholesale druggists generally hold a "spirit dealer's" licence, 10l. 10s. per annum, obtainable from the excise, and not requiring a magistrate's certificate. The holder of a dealer's licence only may not sell spirit in quantities less than two gallons: Wholesale dealers are required to take out a patent-medicine licence as well as retail dealers.

224/46. *A Reader*.—If the Pharmacy Bill should pass this year, it would probably be 1895 before the new examination requirements came into operation.

MISCELLANEOUS INQUIRIES.

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

A large number of correspondents ask us for formulae and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulae or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

193/23. *Eugenium*.—**Analysis of Whisky.**—For sugar you must simply evaporate, examine and weigh the residue. Good whisky does not contain more than 100 grains of solids per gallon. You cannot accurately determine the percentage of fusel oil, but you may do it approximately by the method of Marquardt, which Mr. Allen gives as follows:—150 grammes of the sample are diluted with water to a density of about .980 and agitated with 50 c.c. of pure chloroform for a quarter of an hour. The aqueous layer is separated and shaken with another 50 c.c. of chloroform, and subsequently treated a third time. The 150 c.c. of chloroform, containing in solution the amyl alcohol of the spirit, is treated in a strong flask or bottle with 2 grammes of sulphuric acid and a solution of 5 grammes of potassium bichromate in 30 c.c. of water. The flask is then closed and kept at a temperature of 85° C., with frequent agitation, for six hours. The liquid is then distilled till all but 20 c.c. have passed over, when 80 c.c. of water is added to the residue and the distillation repeated till only 5 c.c. remains in the flask. The distillates are digested for half an hour with barium carbonate, in a flask furnished with an inverted condenser, after which the chloroform is distilled off and the aqueous liquid evaporated to a volume of 5 c.c. The solution is then filtered from the excess of barium carbonate, and the filtrate evaporated to dryness at 100°. The residue ("A") is weighed, dissolved in water, and the solution diluted to 100 c.c. 50 c.c. measure is acidulated with nitric acid and precipitated by silver nitrate, the resultant chloride of silver being collected, weighed, and calculated into its equivalent of chlorine (143.5 of AgCl = 35.5 of Cl). The remaining 50 c.c. is precipitated with dilute sulphuric acid, the barium sulphate being collected and weighed. The weight found is calculated into its equivalent of barium (233 of BaSO₄ = 137 of Ba). The sum of the weights of the barium and chlorine found, subtracted from that of the residue A, gives the weight of the valeric radicle contained therein, and this, multiplied by the factor 0.871, gives the weight of amyl alcohol in the 150 grammes of spirit employed for the operation.

213/49. *Vaseline* wishes to know the "name and address of the maker of civet or artificial musk." "Vaseline" is evidently a little mixed about the subject, but if he will consult our advertising pages of the early part of last year he will find the name of the English agents for Musc-Baur, which, we presume, is what he requires.

212/13. *Elecampare* sends a sample of a mixture used in the North of England for **Black-leg in Calves**, and asks us what it is. Its composition is:—

	Parts
Tinct. aloes co.	2
Ol. tereb. co.	2
Ol. pici	2

and is sometimes given in gruel in doses of ʒss to ʒij., or inserted under the skin. It is a cruel and barbaric method, and no possible good can come of it. Black-leg, or quarter-ill, pook, puck, struck, blood struck, &c., is a germ disease due to a specific bacillus (*bacillus anthracis*), and there is no preventive remedy or cure when it has made its appearance. Inoculation has been tried by Pasteur and by Pamberthy and others at the instigation of the Royal Agricultural Society, but the dangers attendant on inoculation are greater than the risk of taking the disease, which is supposed to come up from the pasture by means of spores conveyed by earthworms when carcases have been buried for years. Animals dying of anthrax (symptomatic, as this form is called) or splenic fever should be burned to ashes. Some fields are well known to be fatal to young stock, and wise men will not attempt to rear them. If all the animals affected with anthrax were burned for a generation the disease might be eradicated, as it never occurs in districts where it has not previously been known, but always recurs where it has already made havoc. While quarter-ill usually affects calves and young stock under two years old, splenic fever more commonly attacks adults. A cow may appear quite well, and while milking tremble and stagger, falling down and even expiring in an hour or two, but more frequently lasting forty or fifty hours. Sometimes dark blood is passed from the rectum or vagina, but we have seen cows apparently well, and but for their temperature as ascertained by clinical thermometer, it would be impossible to say that in a few hours they would be dead. This form of anthrax comes under the Contagious Diseases (Animals) Act since 1886, but no compulsory slaughter is ordered or compensation given in cases of quarter-ill. Setoning and rowelling the dewlap was formerly very much practised, but has lately fallen into disuse without anything better taking its place.

214/19. *HCL*.—Our reply in our issue of January 3 was perfectly correct. You should not trouble yourself about the moisture, which has nothing to do with tincture of opium. All that is needed is to ensure that the opium contains the proper amount of morphine. If it contains less than 10 per cent., then you must use more than 1½ oz. of the drug to each pint of menstruum. If it contains more, you may dilute the resulting tincture to the desired strength. For a method for estimating the tincture see *THE CHEMIST AND DRUGGIST*, September 6, 1890, page 333.

216/43. *W. H. G.*—**Iodic Hydrarg.** is the name which has been given to a mixture of potassium iodide and mercuric chloride manufactured by Messrs. Burroughs, Wellcome & Co. Dr. A. P. Luff was the originator of the idea. The strength of the solution for injections is 1 grain to 3 oz. of water. This antiseptic is said to possess double the bactericidal power of corrosive sublimate. Micrococci and bacilli in active growth without spores are soon killed by solutions of 1 in 40,000. Solutions of 1 in 2,000 will rapidly destroy the spores of *bacillus anthracis* and *bacillus subtilis*. Iodic hydrarg. may be dissolved in ordinary water without decomposition, and is soluble in an equal quantity of water at ordinary temperatures. Cases of trachoma in granular ophthalmia are best treated with a solution of iodic hydrarg. 1 in 300 or 500; it should be brushed upon the lids. It may also be used 1 in 7,000 of water as a lotion for frequently washing out the eyes. This is the information which you require, we think; for the rest see Messrs. Burroughs, Wellcome & Co.'s list in the *DIARY*.

219/23. *Partisan*.—**Disapente**.—There are various formulae for this, which are all substitutes for the original. One of the best is composed of gentian, 28 parts; bayberries, 5 parts; guaiacum wood, 4 parts; bole, 4 parts; and eichona, 4 parts, all in powder and mixed. Cinchona which has been used for making tincture is good enough.

213/67. *Ex A.P.S.*—The Vaccination Inquiry is not yet finished. Three bulky reports of the evidence have been already published.

219/21. *Two Chums*.—There is not, so far as we know, any particular demand for chemists' assistants in either India or South Africa. It would be unwise to go to India without an engagement beforehand, and a man, to succeed in South Africa, ought to be able and willing to turn his hand to other occupations. For details of the conditions of pharmacy in these and other countries, refer to an article published in this journal on May 31, 1890.

221/35. *Vetrino*.—We shall publish a work on "Veterinary Counter Practice," written expressly for chemists, in a few weeks.

219/50. *J. J. C.*—**Clarifying Muddy Beer**.—If a beer-retailer does not use the finings supplied by the brewer, care must be taken not to use anything else than the beer itself to dissolve the isinglass. This is necessary for fiscal reasons. An ounce of isinglass is sufficient for about 15 gallons of beer. Place the isinglass in a jar and pour some of the beer upon it along with a teaspoonful of salicylic acid; when all the beer is absorbed add more, and so on, until the isinglass ceases to swell. Then pass it through a coarse sieve, and add it to the beer, stirring now and then for an hour or two, after which the beer must be allowed to settle. The sifting may be omitted if the isinglass does not contain much fibre.

218/71. *Talhaiaru*.—A teaspoonful of antimonial wine every three hours will suffice to keep up sickness.

220/6. *S. W. E.*—**Roup Pills for Fowls**.—We have not the formula for the pills which you mention. A very good one is composed of antimonial powder, ginger and calomel, of each a grain. Mass with eopaiba.

220/49. *Microbe*.—For **Marking Linen with Stencil-plate** you cannot do better than use the marking-ink according to the modified formula, thickening it with tragacanth.

220/35. *J. Walters*.—(1) The book is out of print. We shall publish one in the course of the year. (2) The Minor declaration may be signed by any chemist and druggist, pharmaceutical chemist, or medical practitioner.

220/17. *F. C.*—(1) There are two formulæ in our issue of November 29, 1890, page 752, which you may take as the basis for a kola beverage. (2) For Jelly Squares the ingredients are gelatine, sugar, water, tartaric acid, flavouring and colouring matter. One of gelatine in eight or ten is a common proportion.

220/1. *Samuel Wood*.—Chloroform and a little brandy or rum make the best preservative for Cod-liver Oil Emulsion. It is rancidity of the oil which you have to guard against, not fermentation.

223/40. *Phenazone*.—The formula for **Tr. Quininæ Ammoniata** is the one suggested by Mr. George Lunan, but you give the quantities incorrectly. They should be as follows:—

Carbonate of ammonia	323 grains
Sulphate of quinine	160 "
Distilled water	10 oz.
Rectified spirit	10 "

Dissolve the carbonate in the water; add the spirit and the quinine shake until dissolved, and filter. Make up the product to 1 pint with distilled water.

20 HIGHEST AWARDS.

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Soap Makers

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H.R.H.

The Prince of Wales.

RETAIL PRICES.			Per Dozen.	WHOLESALE PRICES.
	6d.	SIZE, unscented	- - -	4s.
	1s.	„ all shapes, Washing or Shaving		8s.
	1s. 6d.	„ Ditto ditto		12s.
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BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

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Mono Carbonate of Soda	1.90
Sulphate of Soda	trace
Chloride of Sodium035
Moisture82
Insoluble	nil

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OF THE FINEST QUALITY.

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DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,
COVENTRY.

GELATINE COATED OVAL PILLS.

*For Stock Sorts, Testimonials, &c.,
see our "Prices Current."*

*For Private Formulæ write for
Estimates.*

COMPRESSED PELLETS.

DISINTEGRATING—SOLUBLE.

We manufacture all varieties, and issue the same in bulk, or put up in metallic boxes or screw-capped bottles, with descriptive labels.

EXTRACT of Malt.

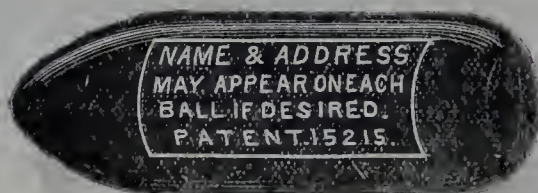
EXTRACT of Malt and Cod Liver Oil.

**EXTRACT of Malt, Cod Liver Oil,
and Hypophosphites.**

In bulk, or in amber bottles in cardboard cases, 12/- per dozen.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist.*

No. 4.—Alterative Balls	24/	per gross.
" 5.—Astringent Balls	24/	"
" 12.—Condition Balls	24/	"
" 6.—Cordial Balls	24/	"
" 7.—Cough Balls	24/	"
" 16.—Cough Balls	27/	"
" 17.—Cough Balls	27/	"
" 8.—Diuretic Balls	24/	"
" 9.—Fever Balls...	24/	"
" 1.—Physic Balls	24/	"
" 2.—Physic Balls	30/	"
" 3.—Physic Balls	36/	"
" 18.—Physic Balls	42/	"
" 19.—Physic Balls	48/	"
" 15.—Stimulating Balls	24/	"
" 10.—Tonic Balls...	24/	"
" 11.—Tonic Balls...	20/	"
" 13.—Worm Balls	30/	"
" 14.—Worm Balls	60/	"

PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic Balls from private recipes.

GRINDING

In all its branches by Patent and Improved Steam Machinery.



DRUGS, CHEMICALS, FULLER'S EARTH,
Seeds, Spices, Roots, Barks, &c.

JORDAN & CO., BERMONDSEY GRINDING MILLS,
WHITE'S GROUNDS, BERMONDSEY, LONDON, S.E.

BAYLEY'S WOOD OILS.

Having been repeatedly asked whether I intended to take any measures to prevent the cutting of Bayley's Wood Oils, I take this opportunity of remarking that, in my experience, such precautions as are at present being adopted by firms to prevent cutting are utterly unavailing. The adjoining paragraph on this subject is extracted from the *British and Colonial Druggist*, Jan. 9, 1891, which aptly illustrates my opinion on the subject. By the systems at present in vogue, not only is the retail trader hampered, but any unprincipled person, if he so wills, may evade such agreement with impunity.

To any Chemist who will co-operate with us we will give advantageous terms and invite correspondence.

C. BAYLEY, Chemist, 2 Park Street, WALSALL.

WELL MEANT, BUT USELESS.

Several chemists inform us that they have been notified by their wholesale house in London that the latter cannot obtain supplies from the maker of a proprietary preparation unless they enter into an agreement, binding not only themselves but their customers, to maintain certain prices. The wholesale house in question declines to give such a guarantee, and consequently supplies are not obtainable. These correspondents ask our opinion of the matter. We can only say in reply to the inquiries addressed to us, that the course proposed by the makers in question as a remedy for "cutting" is simply impracticable. The same thing has been tried by the makers of other preparations and in various trades, and, so far as we are aware, it has never accomplished anything beyond causing temporary inconvenience to their customers and probably the reduction of their own output. Individual attempts to deal in this way with the reduced prices which are the outcome of modern competition are of no practical use. We are as much alive as anyone to the benefit which would accrue to all retailers if prices could be kept up, but this will never be accomplished by isolated arrangements of this description.

SALICYLIC ACID

AND

SALICYLATES

[PHYSIOLOGICALLY PURE]

MANUFACTURED UNDER KOLBE'S PROCESS BY

[PHYSIOLOGICALLY PURE]

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To be obtained from the Sole Agents.

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Telegrams—"FUERST LONDON." Telephone No. 1050.

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Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application.

DEALERS IN PURE CHEMICALS

For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable Quotations can be given on application.

THE OLD ORIGINAL HOME OF COCA WINE (ARMBRECHT).

COCA (ARMBRECHT) WINE



For Fatigue of Mind and Body.



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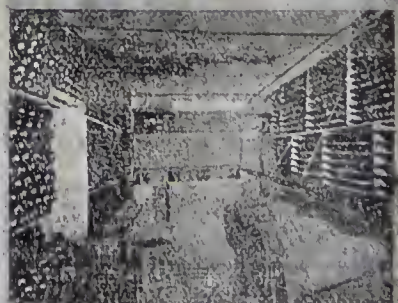
CELLAR No. 7.



STORE ROOM.



PHARMACY.



STORE ROOM.

ARMBRECHT, NELSON & CO.
2, 3 & 4, DUKE STREET, GROSVENOR SQUARE.
LONDON.

Sold by all Wholesale Druggists throughout Great Britain, at 36/ per dozen, or in dozen lots, carriage paid direct, with the usual cash discount.

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

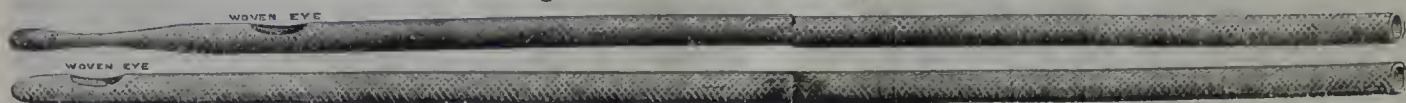
Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES.

To be had of all Surgical Instrument Makers and Wholesale Houses.



BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

THE CARBOLIC SMOKE BALL

WILL POSITIVELY CURE.

COLDS
CURED

COLDS
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COLDS
CURED

COLDS
CURED

For Inhalation only.



For Inhalation only.

As all the Diseases mentioned herein proceed from one cause, they can, therefore, be cured by one remedy—namely, the CARBOLIC SMOKE BALL.

The **Carbolic Smoke Ball** will not only cure all diseases caused by taking cold, but will, if used in time, positively ward off colds.

One **Carbolic Smoke Ball** will last a family several months, making it the cheapest remedy in the world at the price—10/, post free.

The **Carbolic Smoke Ball** can be refilled, when empty, at a cost of 5/, post free.

COLD
IN THE HEAD
Cured in twelve hours.

COLD
ON THE CHEST
Cured in twelve hours.

CATARRH
Cured in three months.

ASTHMA
Cured in every case;
relieved in ten minutes.

BRONCHITIS
Cured in every case.

HOARSENESS
Cured in twelve hours.

LOSS OF VOICE
Fully restored.

INFLUENZA
Cured in two days.

HAY FEVER
A cure guaranteed.

THROAT
DEAFNESS
Cured in three months.

SORE THROAT
Cured in twelve hours.

SNORING
Cured by inhaling at
bedtime.

CROUP
Relieved in five minutes.

WHOOPI
COUGH
Relieved the first appli-
cation.

NEURALGIA
Cured in ten minutes.

HEADACHE
Cured in ten minutes.

BEWARE OF WORTHLESS AND FRAUDULENT IMITATIONS.

Retail Price, 10/- each. Chemists can obtain from all the Patent Medicine Warehousemen.

WHOLESALE AND SHIPPING FROM—

WILCOX & CO., 239 OXFORD STREET, LONDON.

ENGLISH "SALVO PETROLIA" VERSUS AMERICAN VASELINE.

PARIS EXHIBITION, 1889,
GOLD MEDAL

AWARDED TO

"SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the
very Purest Form, and we claim that it
is superior to Vaseline.

PACKED IN TINS, 1, 5, 10, 14, 28, 56, AND 112 LBS.

"OLEUM DEELINÆ"

(REGISTERED).

UNIVERSALLY ADOPTED BY THE MEDICAL PROFESSION FOR
OPHTHALMIA, SCURVY, RINGWORM
ECZEMA, SKIN-DISEASES,
For External and Internal Irritation of every kind.

PACKED IN OASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles;
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers.
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

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Works—SALTNEY, CHESTER.

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PRICE LIST AND SAMPLES UPON APPLICATION.

Dr. ZIEMER'S ALEXANDRA- DENTIFRICE.

Matchless for the
Teeth, Gums, and Breath!

Guaranteed Non-
injurious to the
Enamel.

Of all
Wholesale
Houses.



Prices:

1/3 size 9/-
2/- „ 15/-
3/6 „ 24/-
per doz.

Show Cards &c.,
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B. W. Ziemer & Co.
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H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-

Egg Julep, 2/-, 4/-

CONCENTRATED

Egg Julep, 2/6,
5/-, 10/6.

Golden Fluid,
10/6, 21/-

EUXURON,
1.6.

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Stimulating Lotion, 5/-,
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Astringent and Tonic
Lotion, 5/-, 10/6.

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Hair Wash, 3/6,

5/-, 10/6, 21/-

Arnica Wash

3/6, 5/-,

10/6.

&c.

EUCHRISMA.
Combines in one clear fluid every valuable
Component both of a Hair Grease and Wash,
3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For renewing the original colour of Grey Hair;
superior to all other Restorers, being perfectly
simple in its Components. Price 6/-.

An elegant Preparation for
the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

RICHARD D. YOUNG'S HIGHEST CLASS AMERICAN PERFUMES.

SPECIAL ODORS.

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YOUNG'S

PERFUMES

combine the
greatest strength and
endurance consistent with
the highest excellence of
quality. They are uniform in
merit and of unvarying character.



AMERICAN TEA OLIVE,

BOUQUET ARABY, LILY BELLS

PRAIRIE WILD. MELAURA.

PERFECT VIOLET,

PURITAN ROSE,

And the usual staple
assortment.

OF ALL WHOLESALE
HOUSES.

In 1-oz. & 2-oz.
bottles. [2]

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LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

ESSENTIAL OILS



Wholesale
and
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only.

APPLICATION.

ON

QUOTATIONS

AND

PRICE LIST

E. C. Z. A.

THE NEW SKIN SOAP,

MADE ONLY BY

BAYLEY & CO., 17 COCKSPUR ST., LONDON,

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACETI SOAP TABLET."

COOK'S ANTISEPTIC SOAP

(THOMSON'S PATENT),

Has been tested in a Physiological Laboratory as a Germ Destroyer, and proved to be more efficient than any other experimented with.
(See "Journal of Chemical Industry, 1888, No. 3.) Of great value in CASES OF

ECZEMA, RINGWORM, SCABIES, FAVUS

AND OTHER SKIN DISEASES.

See "The Lancet," 12 May, 1888, page 936.

Price in 3-Tablet Boxes, per doz. **12/-**; Selling Price, **1/6**; in $\frac{1}{4}$ -gross Boxes, **10/6** per box.

GOLD MEDAL, PARIS EXHIBITION, 1889.

Can be obtained through MESSRS. S. MAW, SON & THOMPSON, LONDON, or of

EDWARD COOK & CO., HOUSEHOLD and TOILET SOAP MAKERS, LONDON, E.

PERFUME SPRINKLERS,

ALSO FOR

HAIR WASHES, CREAMS,
OILS, INKS,

&c.

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Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

Established 1820

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G. B. KENT & SONS

Have been awarded the ONLY



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GOLD MEDAL



At the Paris Exhibition, 1889, for ENGLISH BRUSHES

See Advt. pp. 277-280, *The Chemist and Druggist Diary*,
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This old-established and celebrated preparation for the Teeth is attractively put up in the form of Liquid, Powder, and Paste, is now being largely advertised to the public.



THE GENUINE
EAU DE BOTOT
IS THE ONLY DENTIFRICE APPROVED
By the Academy of Medicine of Paris.

	Size	Size	Size
EAU de BOTOT	1/6, 11/9;	2/6, 20/;	5/32, 9 doz
POWDER	1/6,	8/6; 2/6,	17/ doz.
PASTE	1/6,	8/6; 2/6,	17/ "

Of all Wholesale Houses.

N.B.—See each Article

has the Signature—

SAMPLE BOXES,
Containing
Powder, Paste, & Liquid
per 8/- doz.

M. BAILEY & CO.

MANUFACTURERS OF DRUGGISTS' SUNDRIES.

M. B. & Co. beg to call the attention of the Trade to the following articles manufactured by them:—

Glass Syringes, Nipple Shields, Breast Exhausters, Fittings for Feeding Bottles, Tubes, and Tube Work in all its branches, &c., &c.

Sole Proprietors and Manufacturers of J. Brooks & Co.'s celebrated Specialities:—Winter Cream, Lip Salve, Solidified Camphor Cream, Glycerine Jelly, Perfumery, &c., &c.

Buyers are cautioned against imitations of these World-renowned preparations. None are genuine unless bearing our Registered Trade Mark.

MAY BE OBTAINED THROUGH ANY OF THE WHOLESALE HOUSES. WHOLESALE AND EXPORT ONLY FROM

M. BAILEY & CO., 32 and 34 Buckingham Road, KINGSLAND, N.



START THE NEW YEAR Well, and Order A Stock of SHIRLEY'S SALEABLE LINES.

A1 Menthol Cones.

THE NEW FIGURE

"JUSTICE"

Given away with 40.
order.This is a charming
figure in WhiteBiscuit China, and is
bound materially to
assist sales.

BOXWOOD PATTERNS.

No.	Doz.
8P. 6d., Acorn on foot	3/3
103B. 4d., Pedestal	2/6
113R. 6d., Reversible	3/6
111 1½ Acorn on foot	6/6
112 6d., Draughtsman	3/3
17F. 1½, " "	5/
9CR. 1½, Reversible	4/6
6 6d., Printed Box-wood Pedestal	3/6
14L. 1½, ditto, ditto	6/3
17S. 6d., ditto flat shape	3/9
17FP. 1, ditto ditto	5/6

CHEAPER KINDS.

No.	Gross.
110 1d., Bottle shape	6/3
110V. 1d., Vase shape	7/
110P. 1d., Pedestal	7/
114 2d., Vase shape, varnished	14/
114P. 2d., Pedestal	14/
Above are 3 doz. on a Card.	
115 3d., Flat shape	2 doz. on a Card 20/
109 4d., Willow pedestal	2/6
117 6d., Large ditto	3/3
118 6d., Lighthouse ditto, a good line	3/

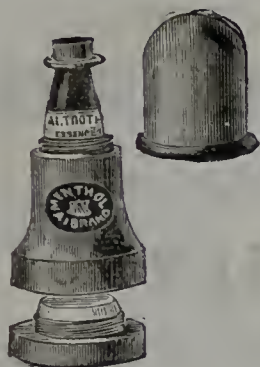
SMELLING BOTTLES.



No. 169.

No.	Doz.
8. Large Watch shape	6/8
No. 52. Medium " "	5/
No. 149. Small " "	4/
No. 10. Toilet shape	6/6
No. 168. Medium Watch	3/6
No. 169. " " "	3/6
No. 43. Toilet shape, wide mouth	7/
No. 104. Toilet shape, Maltese stopper	5/

Hundreds of patterns, both of Sprays and Smelling Bottles, China and Glass, to select from. Those who cannot call and see samples, order what you require, stating what kind of shapes preferred, and you can rely on good assortments being sent.



NEW LINES.

Screw boxwood case
Menthol Cone
one end, and
Smelling Salts,
in English stoppered
bottle, the other.
8/ doz.

Screw boxwood case,
containing MENTHOL
CONE one end, and
TOOTHACHE ESSENCE
the other, 4/ doz.

CHILBLAIN PENCILS.

A Glass Tube fitted with
a cap, which has simply
to be taken off, and the
Pencil applied.

3/6 per dozen.

SELLS AT SIGHT.

COCAINE & MENTHOL
TOOTHACHE TUBE 6PCocaine & Mentho
Toothache Tube.

A composition of two
such powerful
anodynes is sufficient
guarantee of their
efficacy.

Attractively carded.
3/8 doz.



A
Splendid
6d.
Line,
3/9 doz.
Sells
at
Sight.

CACHOUS, FLORAL



Heliotrope, Musk, Vio-
let, &c., Diamond and
heart shape. In tin
boxes, with pretty
chromo pictures on lid.
2 dozen in box, 2/3 doz.
24/- per gross.

FULLER'S EARTH

In round tin boxes, with
chromo on lid, or simply
labelled.

4/- dozen.

3-doz = n 3/9 dozen.

CARBOLIC
TOOTH POWDER

Very attractively got up, in
tin boxes.

1 oz., 3/ doz.; 6 doz., 2/9; 12 doz., 2/6
1½ " 3/6 " 3/3 " 3/
3 " 5/ " 4/9 " 4/6
1-gross lot's, own name on label.



4/ doz., 3 doz., 3/8.
Attractively carded.

A1 MENTHOL LEAVES. (PATENT.)

A New Article, in which Menthol is applied in a similar way to Mustard Leaves. They will be found most useful in cases of Sciatica and Nervous Headache, also to those suffering from Sleeplessness. 3/6 doz. Packets. Three Leaves in a Packet. Will stand any climate.

ETIENNE FRÈRES' PERFUMERY.

CHARMING PERFUMES, ATTRACTIVELY BOXED, HANDSOMELY LABELLED.

1½ size, 1 oz., in well-stoppered Lundborg shape Bottles, 8/ doz.; 2 oz. 13/ doz.; 4 oz. 24/ doz.

SAMPLE 1d. TUBES, on ¼ and ½ gross cards, 8/ gross. This is a Marvellous Line.

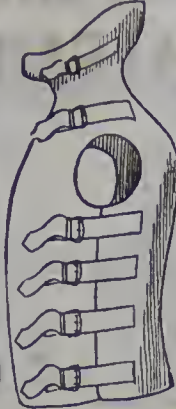
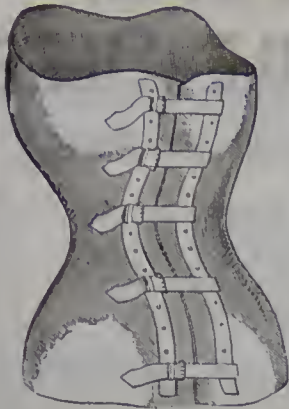
ARTHUR W. SHIRLEY, 55 FARRINGDON ROAD, LONDON, E.C.

COCKING'S ADAPTABLE PORO-PLASTIC JACKETS AND SPLINTS.

Patentee and Sole Manufacturer, J. T. COCKING, PLYMOUTH.

Cervical Jacket.

1. Cervical Jacket, No. 3.

JACKET
(In cases of slight deformity)INSTRUCTIONS
FOR MEASUREMENT.

Circumference at axilla.

" waist.

" hips.

Length from axilla to great trochanter.

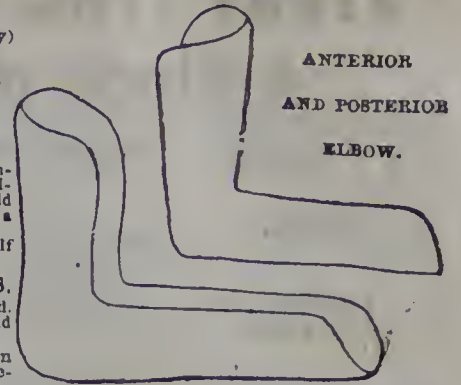
In severe angular cases circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

CERVICAL JACKETS.

Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.



A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION

The only make of
CHEST PROTECTORS
that will Wash
WITHOUT INJURY.



Manufacturers:
THE LIVERPOOL LINT CO.
MARK ST. MILL,
LIVERPOOL.

LINT.**GAMGEE TISSUE.**

(PATENT ABSORBENT GAUZE AND BOTTOM WOOL.)

**ABSORBENT
COTTON WOOL.****ROLL BANDAGES.****ANTISEPTIC DRESSINGS.****ROBINSON & SONS,**

COTTON SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS, COTTON WOOLS,**BANDAGES, & ANTISEPTIC DRESSINGS,****WHEAT BRIDGE MILLS,****NEAR CHESTERFIELD.**

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Depot—55 Fann Street, Aldersgate Street, London.

FRANK WOOD

(From W. WOOD & SON, MANCHESTER).

42 BELVOIR STREET, LEICESTER.

Trusses, Single...	...	...	12/6 per doz.	Elastic Stockings, Cotton	...	2/2 each.
" Double	...	...	20/- "	" " Silk	...	3/4 "
" Single Femoral	...	...	17/- "	Suspenders, Cotton Bags	...	6/6 per doz.
" Double	...	...	28/- "	" Silk Bags	...	14/- "
" Single Scrotal	...	...	34/- "	Clinical Thermometers	...	25/- "
" Double	52/- "	Elastic Gum Catheters	...	7/6 "

TERMS—5 per cent. discount Cash; 2½ per cent. discount Monthly.

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PATENT MEDICINES, DRUGGISTS' SUNDRIES,
PHOTOGRAPHIC REQUISITES, &c., &c.

NOVELTIES
FOR
CHEMISTS.

The
following article
will be found
a Seasonable One:—



SMELLING BOTTLE,
IN
Leather Purse with Clasp.
TWO SIZES.
Per Doz., 7/- and 8/-.

Agencies
undertaken on
favourable
terms.

ESTABLISHED UPWARDS OF A CENTURY.

MAY, ROBERTS & CO.,

9 CLERKENWELL ROAD, LONDON, E.C.
TELEGRAPHIC ADDRESS—"FEEDING BOTTLES LONDON."

ILLUSTRATED CATALOGUE, 1891, DRUGGISTS' SUNDRIES, SURGICAL APPLIANCES, PATENT MEDICINES, ETC., NOW READY.

POST FREE ON APPLICATION.

PEPSALIA

G. & G. STERN, 62 GRAY'S INN ROAD, LONDON, W.C.

AND

PUMILINE

Guy's

Dr. Andrew Wilson, F.R.S.E., writes:
"As a stimulus to weak digestion,
Guy's Tonic will act admirably,
while in cases of painful digestion
and flatulence it will prove of signal
service. The merits of this prepara-
tion consist in its being compounded
of ingredients which are habitually
used by physicians in cases of want
of tone, and in its safe and pleasant
nature as a family remedy."—
Health, August 1, 1890.

Guy's Tonic is sold Retail at 2s. 9d.
per bottle. One size only prepared.
We are co-operating with Chemists
and the trade generally, arranging
satisfactory terms in return for
general enterprise on our behalf.
For terms and particulars, apply to
the Proprietors—Guy's Tonic Com-
pany, 4 Ludgate Circus, London,
E.C. It may also be obtained from
the usual Wholesale Houses.

Tonic

FREDK. BOEHM,

Billiter Square Buildings, LONDON.

ESSENTIAL OILS.
POMADES. PERFUMES.
FLORAL WATERS.
OTTO OF ROSE.
FRENCH CASTOR OIL.
PETROLEUM JELLY. MINERAL OIL.
SOAP, AND CONFECTIONERS' COLOURS.

PRICES ON APPLICATION. 12

ALLCHIN'S SMELLING SALTS.

The increasing demand for these celebrated Smelling Salts has induced the Proprietor to bring them out in a more portable and elegant form than hitherto supplied. The New-shaped Bottles will be found well worth the attention of the Trade.

WHITE FLINT GLASS, Handsomely Cut, 4 Sizes, Retail 6d. 1/6, 2/-, 2/6
" " " Watch Shape, for the Pocket, 3 Sizes, Retail.. .. 1/-, 1/6, 2/-

ALFRED ALLCHIN'S PHARMACEUTICAL PREPARATIONS.

SMELLING SALTS.—The MONOCARBONATE OF AMMONIA, manufactured by ALFRED ALLCHIN, is the Neutral Salt so much valued for the preparation of Smelling Salts. It retains its pungency as long as any Salt remains. 1-lb. bottles, 2s. 8d. each.

LIQ. AMMON. ODORIF., or **VOLATILE ESS.**, for Allchin's Ammon. Monocarb. In Stoppered Bottles, 4-oz., 1s. 8d.; 8-oz. 3s.; 16-oz., 6s. each.

PUNGENTS, with handsome Cut Stoppers, filled with Allchin's Smelling Salts, 8s. per doz.; retail, 1s.

OL. ROSÆ. CONCENT.—One ounce of this Concentrated Solution of Anchusine, mixed with two pounds of Oil, will give it the usual colour; it is also admirably adapted for colouring Pomades, Lip Salve, Camphor Balls, &c. 4s. per lb.

OL. FLAV. CONC.—One ounce, added to two pounds of Pomade, will give the usual golden colour, which is permanent. 4s. per lb.

Sole Proprietors—

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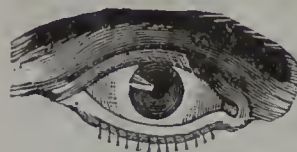
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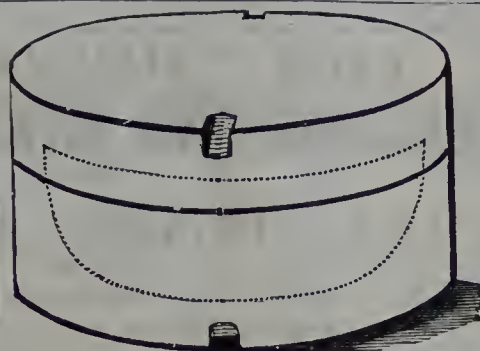
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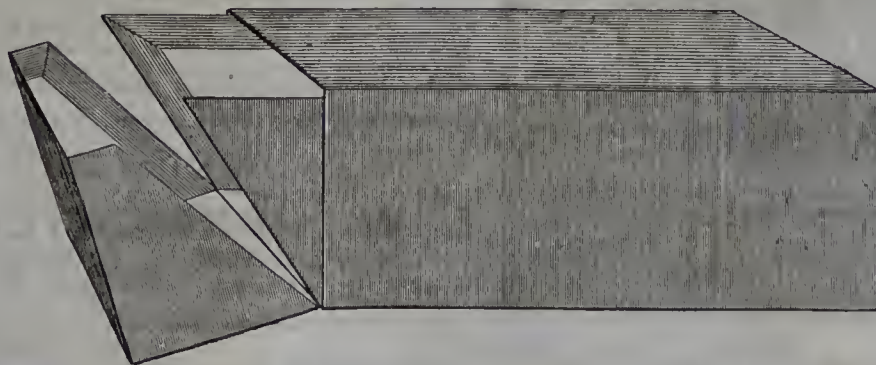
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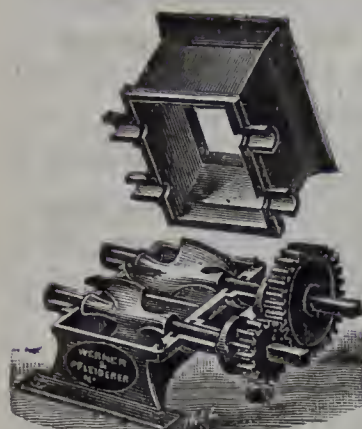
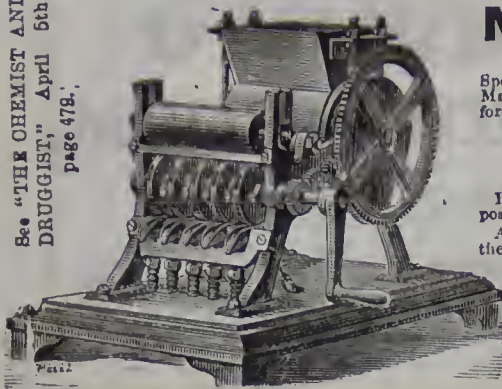
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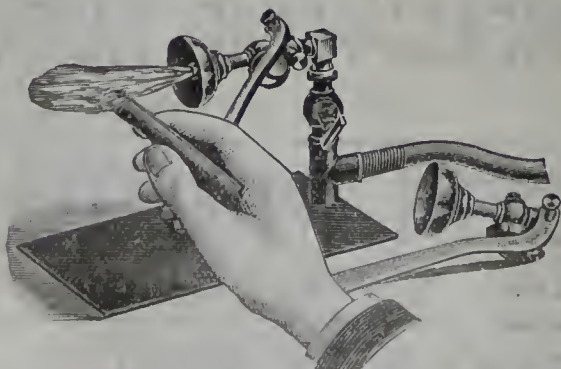
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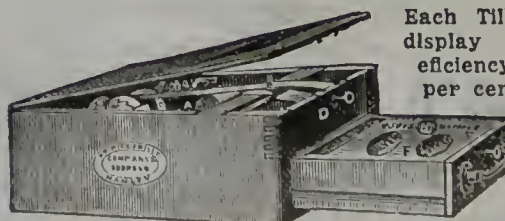


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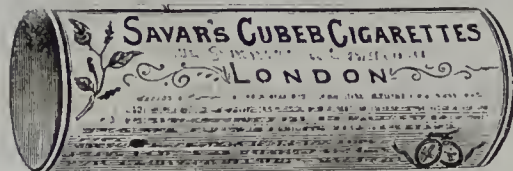
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